Allen-Bradley

NeXUS Module

1756-CLX/C

User Manual

Rockwell Automation

Important User Information

Because of the variety of uses for the products described in this publication, those responsible for the application and use of these products must satisfy themselves that all necessary steps have been taken to assure that each application and use meets all performance and safety requirements, including any applicable laws, regulations, codes and standards. In no event will Allen-Bradley be responsible or liable for indirect or consequential damage resulting from the use or application of these products.

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Allen-Bradley publication SGI-1.1, *Safety Guidelines for the Application, Installation and Maintenance of Solid-State Control* (available from your local Allen-Bradley office), describes some important differences between solid-state equipment and electromechanical devices that should be taken into consideration when applying products such as those described in this publication.

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Throughout this publication, notes may be used to make you aware of safety considerations. The following annotations and their accompanying statements help you to identify a potential hazard, avoid a potential hazard, and recognize the consequences of a potential hazard:

ATTENTION

Identifies information about practices or circumstances that can lead to personal injury or death, property damage, or economic loss.

IMPORTANT

Identifies information that is critical for successful application and understanding of the product.

ATTENTION

Environment and Enclosure

This equipment is intended for use in a Pollution Degree 2 industrial environment, in overvoltage Category II applications (as defined in IEC publication 60664-1), at altitudes up to 2000 meters without derating.

This equipment is supplied as "open type" equipment. It must be mounted within an enclosure that is suitably designed for those specific environmental conditions that will be present and appropriately designed to prevent personal injury resulting from accessibility to live parts. The interior of the enclosure must be accessible only by the use of a tool. Subsequent sections of this publication may contain additional information regarding specific enclosure type ratings that are required to comply with certain product safety certifications.

See NEMA Standards publication 250 and IEC publication 60529, as applicable, for explanations of the degrees of protection provided by different types of enclosure. Also, see the appropriate sections in this publication, as well as the Allen-Bradley publication 1770-4.1 ("Industrial Automation Wiring and Grounding Guidelines"), for additional installation requirements pertaining to this equipment.

Rockwell Automation Support

Rockwell Automation offers support services worldwide, with over 75 sales/support offices, 512 authorized distributors and 260 authorized systems integrators located throughout the United States alone, as well as Rockwell Automation representatives in every major country in the world.

IMPORTANT

The 1756-CLX/C module is supported only by Rockwell Automation Japan. Refer to Technical Product Assistance on page 4 for contact information.

Product Support

Contact your Rockwell Automation representative for:

- sales and order support
- product technical training
- warranty support
- support service agreements

Technical Product Assistance

If you need to contact Rockwell Automation for technical assistance, please review the troubleshooting information first. If the problem persists, contact a Rockwell Automation representative at the following location:

Rockwell Automation Japan Co., Ltd.
Tokyo Headquarters
Shinkawa Sanko Building
8F/9F, 1-3-17, Shinkawa,
Chuo-ku, Tokyo 104-0033
Tokyo
Japan

Telephone: 81-3-3206-2781

Fax: 81-3-3206-2788

What This Preface Contains

This preface describes how to use this manual. The following table describes what this preface contains and where to find it.

For information about this topic:	See page:
Who Should Use This Manual	P-1
Purpose of This Manual	P-1
What This Manual Contains	P-2
Common Techniques Used in This Manual	P-3
Related Documentation	P-3

Who Should Use This Manual

You must be able to program and operate an Allen-Bradley ControlLogix™ Logix controller and ControlLogix I/O modules to efficiently use your 1756-CLX/C module.

We assume that you know how to do this in this manual. If you do not, refer to the list of Related Documentation on page P-3 of this preface before you attempt to use this module.

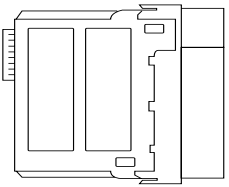
Purpose of This Manual

This manual describes how to install, configure, and troubleshoot your 1756-CLX/C module.

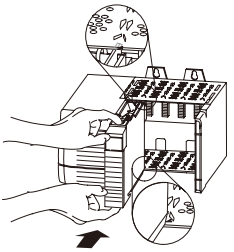
What This Manual Contains

This user manual contains the following sections:

Chapter 1 - About the 1756-CLX/C Module
Description of the 1756-CLX/C module

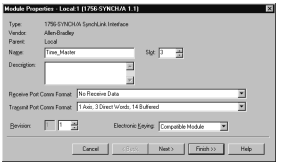


Chapter 2 - Install the 1756-CLX/C Module
Description of how to install the 1756-CLX/C module and connect the Ethernet cable



Chapter 3 - About the NeXUS Network
Overview of the NeXUS network and functions supported by the 1756-CLX/C module

Chapter 4 - Configure the 1756-CLX/C Module
Description of how to configure the 1756-CLX/C module with RSLogix 5000



Chapter 5 - Status Indicators and Troubleshooting
Description of how to troubleshoot the 1756-CLX/C module

Appendix A - Specifications
Listing of the 1756-CLX/C module specifications

Appendix B - Appendix B - Factory-set Jumpers
Description of all factory-set jumper positions

Appendix C - 1756-CLX/C Web Interface
Describes how to access and use web-based information about the 1756-CLX/C module

Appendix D - 1756-CLX/C Module Backplane Communication Tag List
Complete list of backplane (API) communication tags

Appendix E - 1756-CLX/C Module Tag List
Complete list of the input and output data tags

Glossary - Definitions of terms used in this manual

Common Techniques Used in This Manual

The following conventions are used throughout this manual:

- Bulleted lists provide information, not procedural steps
- Numbered lists provide sequential steps
- Screen captures are pictures of the software's actual screens
- The names of screen buttons and fields are often in **bold** in the text of a procedure

TIP This symbol identifies helpful information.

Related Documentation

The following table lists related ControlLogix documentation:

Table A Related Documentation

Catalog number:	Document title:	Pub. number:
1756-A4, -A7, -A10, -A13, -A17	ControlLogix Chassis Installation Instructions	1756-IN080C
1756-PA72, -PB72	ControlLogix Power Supply Installation Instructions	1756-IN078B
1756-PA75, -PB75	ControlLogix Power Supply Installation Instructions	1756-IN596A
1756-Series	ControlLogix Module Installation Instructions (Each module has separate installation document.)	Multiple 1756-IN numbers
1756-Series	ControlLogix System User Manual	1756-UM001

TIP Many of the above publications are available online from the Automation Bookstore (www.theautomationbookstore.com).

TIP Rockwell Software products are provided with extensive tutorials and online help. We recommend that you use the tutorials and help menus to learn about these products.

For more information about Rockwell Software products, visit the Rockwell Software internet site (www.software.rockwell.com).

Notes:

Important User Information 1-2
Rockwell Automation Support 1-3
Product Support 1-3
Technical Product Assistance 1-4

Preface

What This Preface Contains P-1
Who Should Use This Manual P-1
Purpose of This Manual P-1
What This Manual Contains P-2
Common Techniques Used in This Manual P-3
Related Documentation P-3

Chapter 1
About the 1756-CLX/C Module

What This Chapter Contains 1-1
About the 1756-CLX/C Module 1-1
Module Features 1-2
Some Points to Remember 1-3
About the Battery 1-4
Hardware/Software Compatibility 1-4
Preventing Electrostatic Discharge 1-5
Removal and Insertion Under Power 1-5
1756-CLX/C Module Architecture 1-6
Configuration Overview 1-6
Process Overview 1-7

Chapter 2
Install the 1756-CLX/C Module

What This Chapter Contains 2-1
Identify Module Components 2-1
About the Jumpers 2-1
Install and Connect the Chassis and Power Supply 2-2
Determine Module Slot Location 2-2
Install the Module in the Chassis 2-3
Apply Power to the Module 2-3
Removal and Insertion under Power 2-4

Make the Ethernet Connection 2-4
Wire the Ethernet Connector 2-4
Plug in the Connector 2-5
Remove or Replace the Module (When Applicable) 2-5
Check Power Supply and Module Status 2-6

Chapter 3
About the NeXUS Network

What This Chapter Contains 3-1
Protocol Structure 3-1
Supported Services 3-2
Network Organization 3-3
Supported ADP Message Types 3-4
Configuration Requirements 3-4
IP Address 3-4
Gateways 3-6
Subnet Mask 3-7
For More Information 3-8

Chapter 4
Configure the 1756-CLX/C Module

What This Chapter Contains 4-1
Configure Your 1756-CLX/C Module 4-1
Configuration Software 4-1
Overview of the Configuration Process 4-2
Create a New Module 4-2
View and Change Module Tags 4-5
Configure the Module IP Address 4-6

Chapter 5
Status Indicators and Troubleshooting

What This Chapter Contains 5-1
Use the LED Status Indicators 5-2
Use the Communications Port Status Indicators 5-3
Use the Alpha-numeric Display 5-3

Appendix A

Specifications

Appendix B

Factory-set Jumpers

Appendix C

1756-CLX/C Web Interface

User Screens C-1

Appendix D

1756-CLX/C Module Backplane Communication Tag List

About the Nexus Communication Flags (NX20 – NX91) D-2
Boot /Reboot 1756-CLX/C Module Procedure D-2
1756-CLX/C Module Configuration Check Procedure D-4
1756-CLX/C System Error Procedure D-5
1756-CLX/C Module Sending Procedure D-6
1756-CLX/C Module Receiving Procedure D-7

Appendix E

1756-CLX/C Module Tag List

Glossary

Index

About the 1756-CLX/C Module

What This Chapter Contains

This chapter provides an overview of the 1756-CLX/C module, its primary features, what it does, and how to use it. You will need to understand the concepts discussed in this chapter in order to configure your module and use it in a control system. The following table lists where to find specific information in this chapter..

For information about this topic:	See page:
About the 1756-CLX/C Module	1-1
Module Features	1-2
Some Points to Remember	1-3
About the Battery	1-4
Hardware/Software Compatibility	1-4
Preventing Electrostatic Discharge	1-5
Removal and Insertion Under Power	1-5
1756-CLX/C Module Architecture	1-6
Configuration Overview	1-6
Process Overview	1-7

About the 1756-CLX/C Module

The 1756-CLX/C Interface Module communicates over a plant-floor local area network known as NeXUS. The network is based on the Autonomous Decentralized Protocol (ADP).

The latest copy of the following ADP specification is available at http://www.mstc.or.jp/jop/misc/spec-e.html:

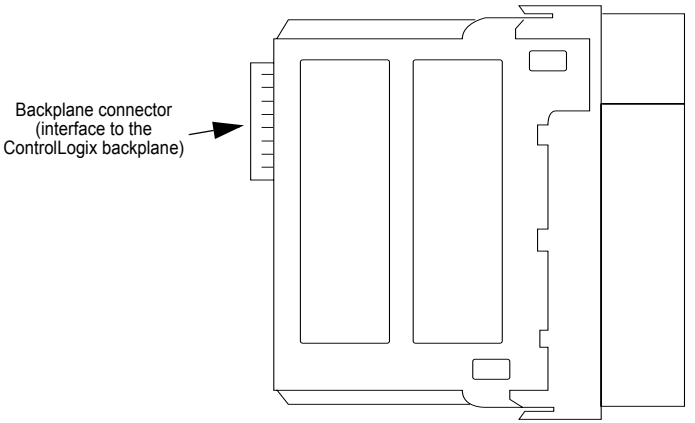
> Manufacturing Science and Technology Center, Japan FA Open Systems Promotion Group, Distributed Manufacturing Architecture Committee, “Specifications for Autonomous Decentralized Protocol”, R. 3.0, MSTC/JOP (September 30, 1999).

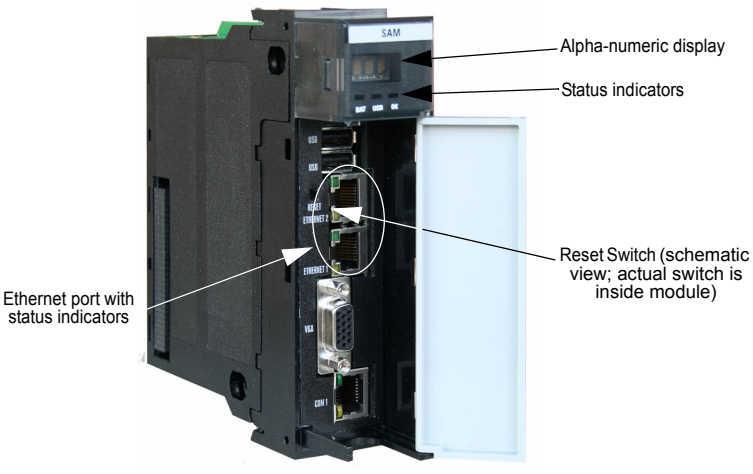
The module mounts into a ControlLogix chassis. It communicates with Logix controllers across the ControlLogix chassis backplane. The module connects to the NeXUS network via an Ethernet cable.

Module Features

1756-CLX/C module features include:

- NeXUS (ADP) messaging encapsulated within standard UDP/IP protocol
- interfacing via Ethernet media
- communication to and from ControlLogix controllers in the same chassis
- battery backed-up SRAM




Alpha-numeric display
Status indicators
Reset Switch (schematic view; actual switch is inside module)
Ethernet port with status indicators

Some Points to Remember

Remember the following points about the 1756-CLX/C module:

- the module is not supported by RSLinx or RSNetworx software
- the module does not support bridging between NeXUS and ControlNet, DeviceNet, EtherNet/IP, or any other network
- the module does not support bridging between NeXUS sub-nets (i.e., bridging between 1756-CLX/C modules located in the same chassis)
- the maximum NeXUS (ADP) message size is 1024 bytes
- data rate is 10Mb/sec.; maximum data rate is 100Mb/sec.
- minimum module data transfer rate is 10 packets/sec.
- the module supports a maximum of 32 TCDs
- one Logix controller can own only one 1756-CLX/C module

ATTENTION Use only the Ethernet connector on the module. Do not use other connectors.

About the Battery

The 1756-CLX/C module uses a rechargeable lithium vanadium pentoxide battery, which, when fully charged, provides backup power for the SRAM memory for approximately 21 days. The module must be powered for approximately 20 hours before the battery becomes fully charged. The battery is not accessible, and should last for the life of the module.

ATTENTION

The lithium battery is not user-replaceable. Do not attempt to access or replace it. Lithium batteries can be hazardous to humans and the environment, and should always be handled and disposed of properly.

Hardware/Software Compatibility

The 1756-CLX/C module is compatible with the following firmware versions and software releases. Contact Rockwell Automation if you need software or firmware upgrades to use this equipment.

Product	Firmware version/software release
ControlLogix Controller	7.09 or higher
RSLogix5000 Software	7.02 or higher

Preventing Electrostatic Discharge

This module is sensitive to electrostatic discharge.

ATTENTION

Preventing Electrostatic Discharge

This equipment is sensitive to electrostatic discharge, which can cause internal damage and affect normal operation. Follow these guidelines when you handle this equipment:

- Touch a grounded object to discharge potential static.
- Wear an approved grounding wrist strap.
- Do not touch connectors or pins on component boards.
- Do not touch circuit components inside the equipment.
- If available, use a static-safe workstation.
- When not in use, store the equipment in appropriate static-safe packaging.

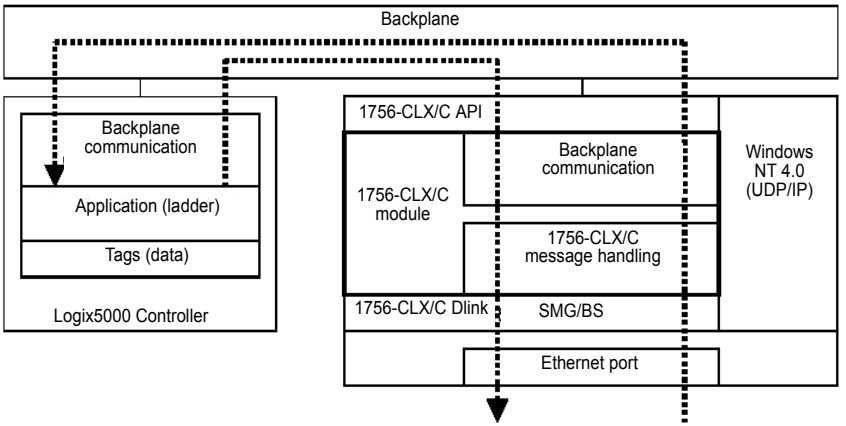
Removal and Insertion Under Power

ATTENTION

We do not recommend that you install or remove the module under power.

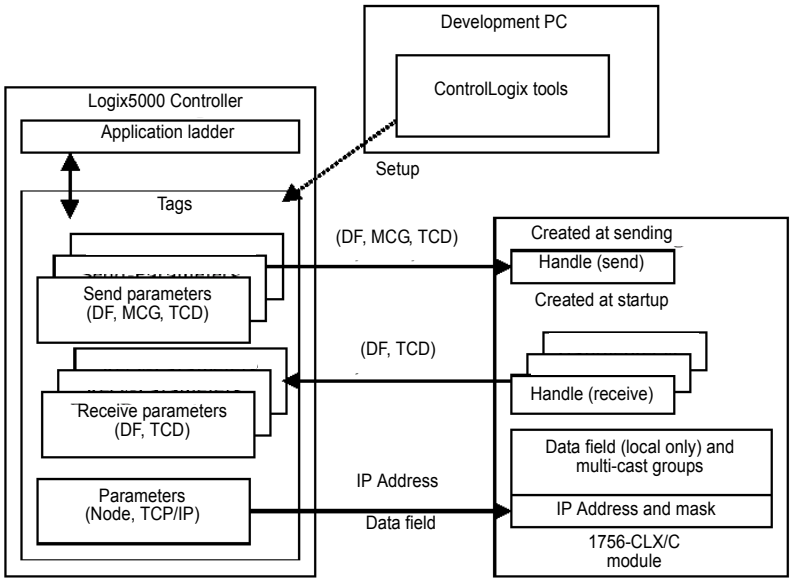
1756-CLX/C Module Architecture

The figure below shows how the various components of a system using the 1756-CLX/C module interact.



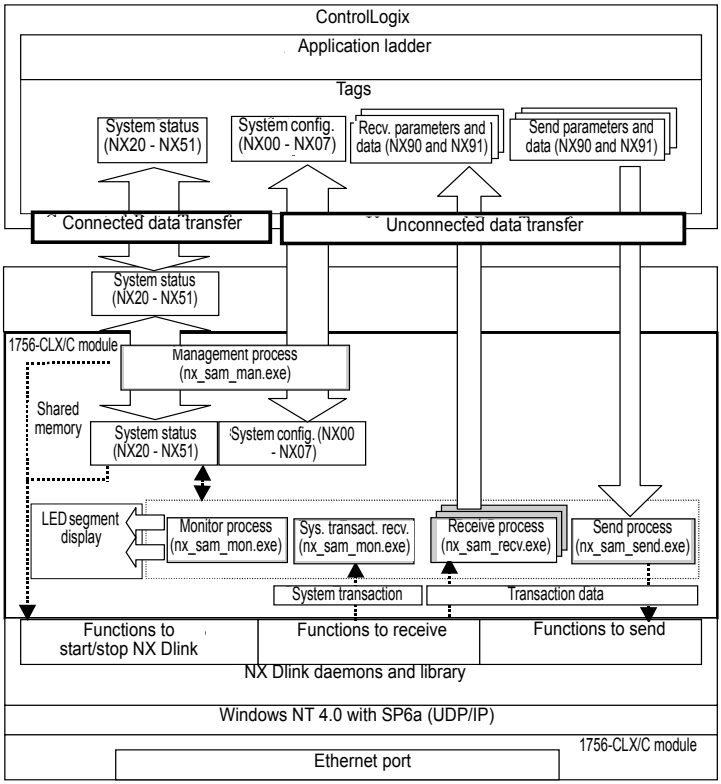
Configuration Overview

The figure below shows an overview of the configuration process.



Process Overview

The figure below shows the flow of data to and from the 1756-CLX/C module.



Notes:

Install the 1756-CLX/C Module

What This Chapter Contains

This chapter describes how to install the 1756-CLX/C module into a ControlLogix chassis.

For information about this topic	See page
Identify Module Components	2-1
Install and Connect the Chassis and Power Supply	2-2
Determine Module Slot Location	2-2
Install the Module in the Chassis	2-3
Apply Power to the Module	2-3
Removal and Insertion under Power	2-4
Make the Ethernet Connection	2-4
Remove or Replace the Module (When Applicable)	2-5
Check Power Supply and Module Status	2-6

Identify Module Components

Refer to Module Features on page 1-2 for an illustration that will help you identify the module components.

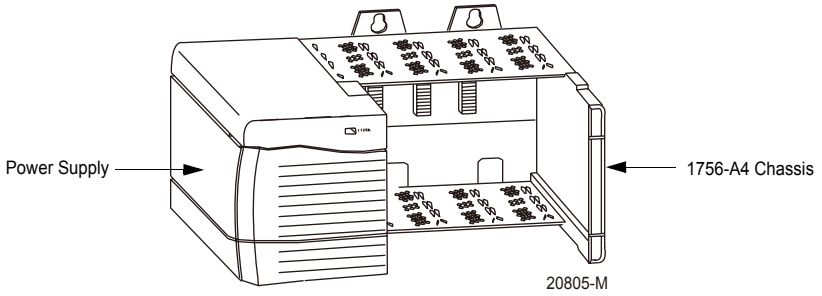
About the Jumpers

ATTENTION

All jumpers on the 1756-CLX/C module are factory-set and should not be changed. If you change a jumper by mistake, refer to Appendix B of this manual to reset it to the proper position.

Install and Connect the Chassis and Power Supply

Before you install the module, you must install and connect a ControlLogix chassis and power supply.

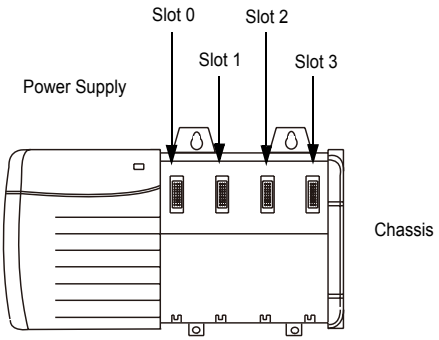


For information on installing these products, refer to the publications listed in the following table.

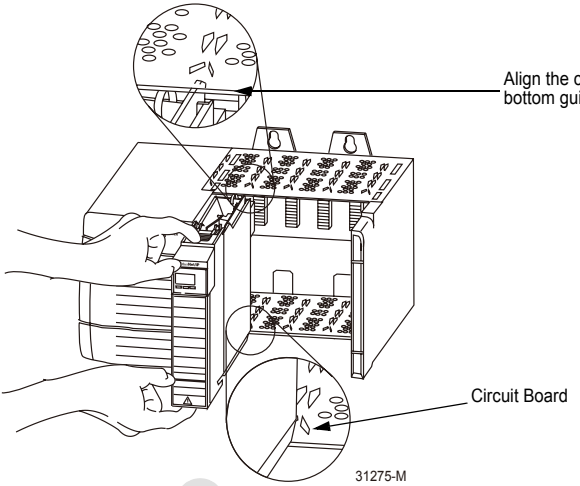
Chassis Type	Chassis Installation	Power Supply	Power Supply Installation
Series B: 1756-A4, -A7, -A10, -A13, -A17	Pub. No. 1756-IN08C	1756-PA72/B	Pub. No. 1756-IN078B
		1756-PB72/B	
		1756-PA75/A	Pub. No. 1756-IN596A
		1756-PB75/A	

Determine Module Slot Location

You can install the module in any slot in the ControlLogix chassis.The figure below shows chassis slot numbering in a 4-slot chassis. Slot 0 is the first slot and is always the left-most slot in the rack (the first slot to the right of the power supply).

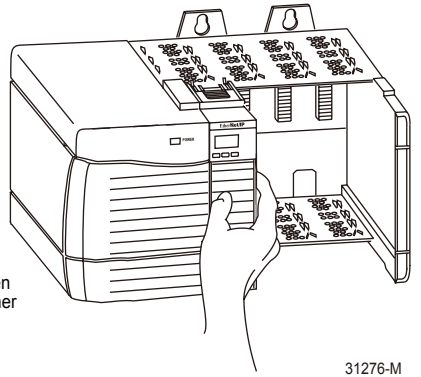


Install the Module in the Chassis



2

Slide the module into the chassis. Make sure the module backplane connector properly connects to the chassis backplane. Check that the holding clips on the top and bottom of the module are securely in the locking holes of the rack.



3

The module is properly installed when it is flush with the power supply or other installed modules.

Apply Power to the Module

Turn ON power. The 1756-CLX/C module performs a self-test. If the module is operating properly, the OK LED turns GREEN.

Removal and Insertion under Power

WARNING

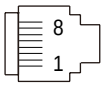
We do not recommend that you install or remove the module under power.

Make the Ethernet Connection

Wire the Ethernet Connector

The 1756-CLX/C module has an Ethernet port you will use to connect to the NeXUS network. Use an RJ45 connector to connect to the Ethernet network. Wire the appropriate connector as shown below:

1 ------ TD+
2 ------ TD-
3 ------ RD+
4 ------ NC
5 ------ NC
6 ------ RD-
7 ------ NC
8 ------ NC



RJ 45

For detailed connnection information, refer to the EtherNet/IP Media Planning and Installation Guide, publication ENET-IN001A-EN-P.

Plug in the Connector

Plug the Ethernet connector into the port.

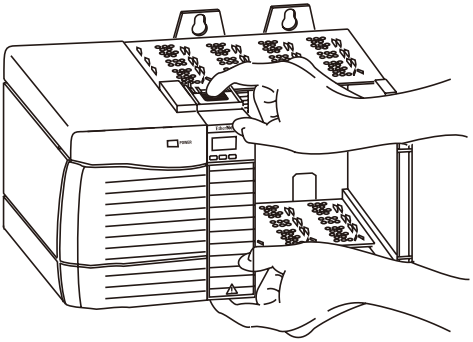
Remove or Replace the Module (When Applicable)

ATTENTION

Before you remove the module, you must disconnect the Ethernet cable.

IMPORTANT

If you are replacing an existing module with an identical one, and you want to resume identical system operation, you must install the new module in the same slot.



1

Push on upper and lower module tabs to disengage them.

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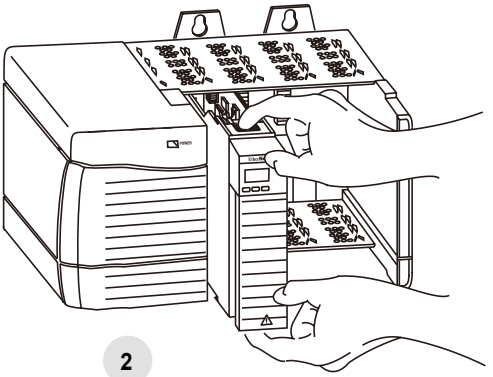


2

Slide module out of chassis.

31278-M

Check Power Supply and Module Status

Refer to chapter 5 to use the status indicators to determine that the 1756-CLX/C module is operating correctly.

About the NeXUS Network

What This Chapter Contains

This chapter provides a brief overview of the NeXUS network. The following table describes what this chapter contains and where to find it.

For information about this topic:	See page:
Protocol Structure	3-1
Supported Services	3-2
Network Organization	3-3
Supported ADP Message Types	3-4
Configuration Requirements	3-4
For More Information	3-8

Protocol Structure

The NeXUS network is a TCP/IP over Ethernet type LAN with a manufacturing message transfer protocol, known as NeXUS, on top, as shown in the table below. This protocol is known as the Autonomous Decentralized Protocol, or ADP.

OSI Layer	NeXUS Network Protocol	Comments
Layer 7 - Application	NEXUS or ADP	See the latest copy of the following ADP specification, available at http://www.mstc.or.jp/jop/misc/spec-e.html: Manufacturing Science and Technology Center, Japan FA Open Systems Promotion Group, Distributed Manufacturing Architecture Committee, “Specifications for Autonomous Decentralized Protocol”, R. 3.0, MSTC/JOP (September 30, 1999).
Layer 6 - Presentation	Not implemented	
Layer 5 - Session	Not implemented	
Layer 4 - Transport	UDP and TCP	Most ADP messages are transferred using the UDP protocol; some are transferred using the TCP protocol
Layer 3 - Network	IP	
Layer 2 - Data Link	IEEE/802.3 - Ethernet	
Layer 1 - Physical	IEEE/802.3 - Ethernet	
Physical Medium	IEEE/802.3 - Ethernet	

Supported Services

The ADP protocol provides to application programs 2 means of message transmission: peer-to-peer and multicast. Because the peer-to-peer message transfer requires a connection-oriented service as an underlayer, it uses the TCP protocol.

Since multicast transmission is connectionless, multicast messages are sent and received using the UDP protocol. As with any connectionless service, delivery and sequence of messages is not guaranteed. Nor is there a flow control mechanism.

TIP The 1756-CLX/C module supports multicast transmission services only.

Network Organization

Looking from the top down, a NeXUS network is viewed as a system of islands called domains, interconnected via a wide area network. Each domain is uniquely identified by a domain number (DMN), which ranges from 1 to 64. The domain number must be provided in all ADP PDU headers. DMN 0 is reserved for the domain considered within the scope of the ADP specification.

A domain is divided into data fields. A data field is an area within which a group of logical nodes communicates with each other via multicast or peer-to-peer messages. A domain is uniquely identified by a data field number (DFN) which ranges from 1 through 255 and must be provided in all ADP PDU headers. One data field is configured per network or sub-network address of the IP address.

Only nodes belonging to the same data field can communicate with each other. A node can belong to more than one data field. Relative to a node, a data field can be local or remote (for example, connected to the node via a router). Only local data fields are considered within the scope of the ADP specification.

To support multicast communication, nodes within a data field are organized into multicast groups. A node can be a member of more than one multicast group. A multicast group is uniquely identified as a multicast group number, or MGN, which ranges from 1 to 255. The MGN must be provided in all multicast ADP PDU headers.

Each NeXUS node, also called a logical node, is uniquely identified by a logical node number, or LNN, which ranges from 1 to 4095. The LNN must be provided in all ADP PDU headers.

The user normally assigns and manages DFNs, LNNs, and MGNs. DMN, DFN, and LNN form the source address (SA). DMN, DFN, and MGN form the destination address (DA) of an ADP PDU header.

Supported ADP Message Types

The 1756-CLX/C module supports the following communication features referenced in the ADP specification:

Communication Feature	Class	Clause (in ADP specification)	Requirements for Conformance	
			Transmission	Reception
Multicast communication	Base-1	4.1	Supported	Supported
Alive signal	Base-1	4.2	Supported	Not supported

Communication Feature	Clause (in ADP specification)	Requirements for Conformance			
		Multicast		Alive signal	
		Transmission	Reception	Transmission	Reception
Test support	4.5	Supported	Supported	Supported	Not supported
Maximum message length	-	(MTU-92) bytes		(MTU-92) bytes	

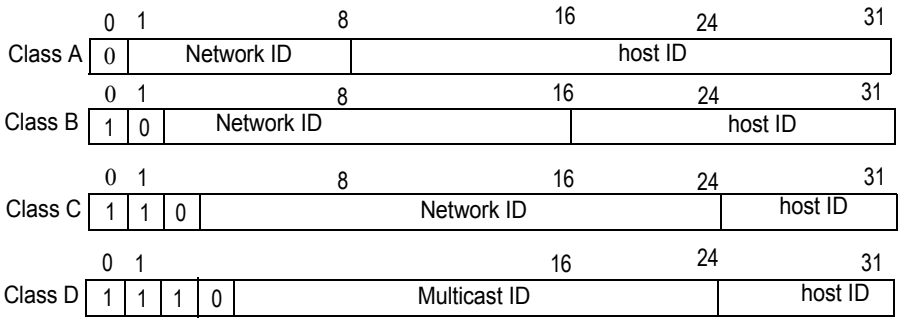
Configuration Requirements

Before you can use your 1756-CLX/C module, you must configure its IP address, gateway, and subnet mask by specifying parameters NX00 through NX02 on the Logix5000 controller. Refer to Appendices D and E of this manual for definitions of these parameters.

IP Address

The IP address identifies each node on the TCP/IP network (or system of connected networks). Each TCP/IP node on a network must have a unique IP address.

The IP address is 32 bits long and is composed of a net ID, host ID, and/or a multicast ID. Each network can be a Class A, B, C, or D format. The class of the network determines how an IP address is formatted.



Each node on the same physical network must have an IP address of the same class and must have the same nework or multicast ID. Each node on the same network must have a different host ID, giving it a unique IP address.

IP addresses are written as four decimal integers (0-255), separated by periods, where each integer gives the value of one byte of the IP address.

EXAMPLE For example, the 32-bit IP address:

10000010 00000000 00000000 00000001 is written as 130.0.0.1.

You can distinguish the class of an IP address from the first integer in its dotted-decimal IP address as follows:

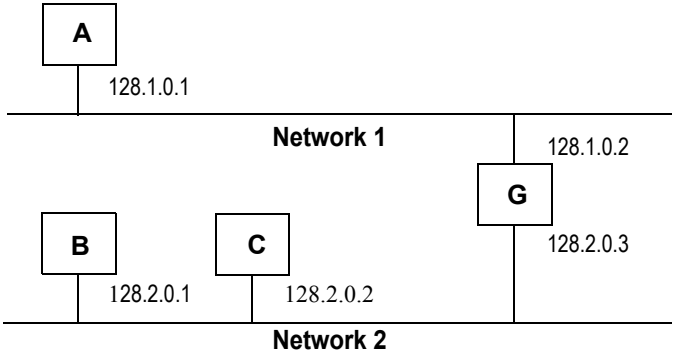
Range of first integer	Class
0 -127	A
128 -191	B
192 - 223	C
224 - 239	D
240 - 255	Experimental

TIP Contact your network administrator or the Network Information Center for a unique fixed IP address to assign to your module.

For more information on Internet addressing, see Comer, Douglas E; Internetworking with TCP-IP, Volume 1: Protocols and Architecture; Englewood Cliffs, N.J.: Prentice-Hall, 1990.

Gateways

A gateway connects individual physical networks into a system of networks. When a node needs to communicate with a node on another network, a gateway transfers the data between the two networks. The following figure shows gateway G connecting Network 1 with Network 2.



When host B with IP address 128.2.0.1 communicates with host C, it knows from C's IP address that C is on the same network. In an Ethernet environment, B can then resolve C's IP address to a MAC address and communicate with C directly.

When host B communicates with host A, it knows from A's IP address that A is on another network (the net IDs are different). In order to send data to A, B must have the IP address of the gateway connecting the two networks. In this example, the gateway's IP address on Network 2 is 128.2.0.3.

The gateway has two IP addresses (128.1.0.2 and 128.2.0.3). The first must be used by hosts on Network 1 and the second must be used by hosts on Network 2. To be usable, a host's gateway must be addressed using a net ID matching its own.

Subnet Mask

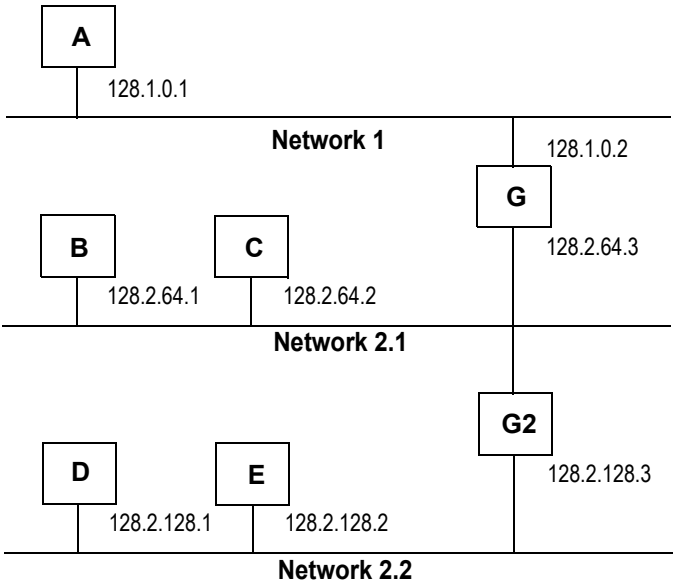
Subnet addressing is an extension of the IP address scheme that allows a site to use a single net ID for multiple physical networks. Routing outside of the site continues by dividing the IP address into a net ID and a host ID via the class. Inside a site, the subnet mask is used to redivide the IP address into a custom net ID portion and host ID portion.

Take Network 2 (a Class B network) in the previous example and add another physical network. Selecting the following subnet mask would add two additional net ID bits allowing for four physical networks:

EXAMPLE 11111111 11111111 11000000 00000000 = 255.255.192.0

Two bits of the Class B host ID have been used to extend the net ID. Each unique combination of bits in the part of the host ID where subnet mask bits are 1 specifies a different physical network.

The new configuration is:



A second network with Hosts D and E has been added. Gateway G2 connects Network 2.1 with Network 2.2. Hosts D and E will use Gateway G2 to communicate with hosts not on Network 2.2. Hosts B and C will use Gateway G to communicate with hosts not on Network 2.1. When B is communicating with D, G (the configured Gateway for B) will route the data from B to D through G2.

For More Information

For more information about Ethernet, refer to the following publications:

Publication data	ISBN
Internetworking with TCP/IP Vol. 1, 2nd ed. by Douglas E. Comer	ISBN 0-13-216987-8
The Ethernet Management Guide – Keeping The Link	ISBN 0-07-046320-4
An Introduction to TCP/IP	ISBN 3-540-96651-X
Computer Networks by Andrew S. Tanenbaum	ISBN 0-13-162959-X

Configure the 1756-CLX/C Module

What This Chapter Contains

This chapter describes why you must configure your 1756-CLX/C module and how to configure it for use in the ControlLogix system.

For information about this topic	See page:
Configure Your 1756-CLX/C Module	4-1
Create a New Module	4-2
View and Change Module Tags	4-5
Configure the Module IP Address	4-6

Configure Your 1756-CLX/C Module

You must configure your module upon installation. The module will not work until it has been configured.

Configuration Software

Use RSLogix 5000 software to set configuration for your 1756-CLX/C module. You have the option of accepting default configuration for your module or writing configuration specific to your application.

Both options are explained in detail, including views of software screens, in this chapter.

Overview of the Configuration Process

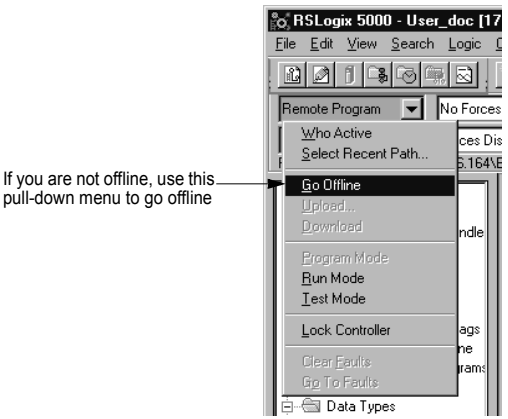
When you use the RSLogix 5000 software to configure a 1756-CLX/C module, you must perform the following steps:

1. Create a new module.
2. Accept the default configuration or change it to specific configuration for the module.
3. Edit configuration for a module when changes are needed.
4. Configure the module's IP address.

Create a New Module

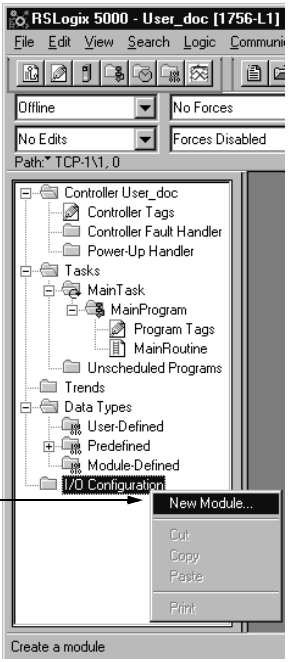
After you have started RSLogix 5000 and created a controller, you must create a new module. The wizard allows you to create a new module and write configuration. You can use default configuration or write specific configuration for your application.

IMPORTANT You must be offline when you create a new module



When you are offline, you must select a new module.

1. Select I/O Configuration.
2. Click on the right mouse button to display the menu.
3. Select New Module

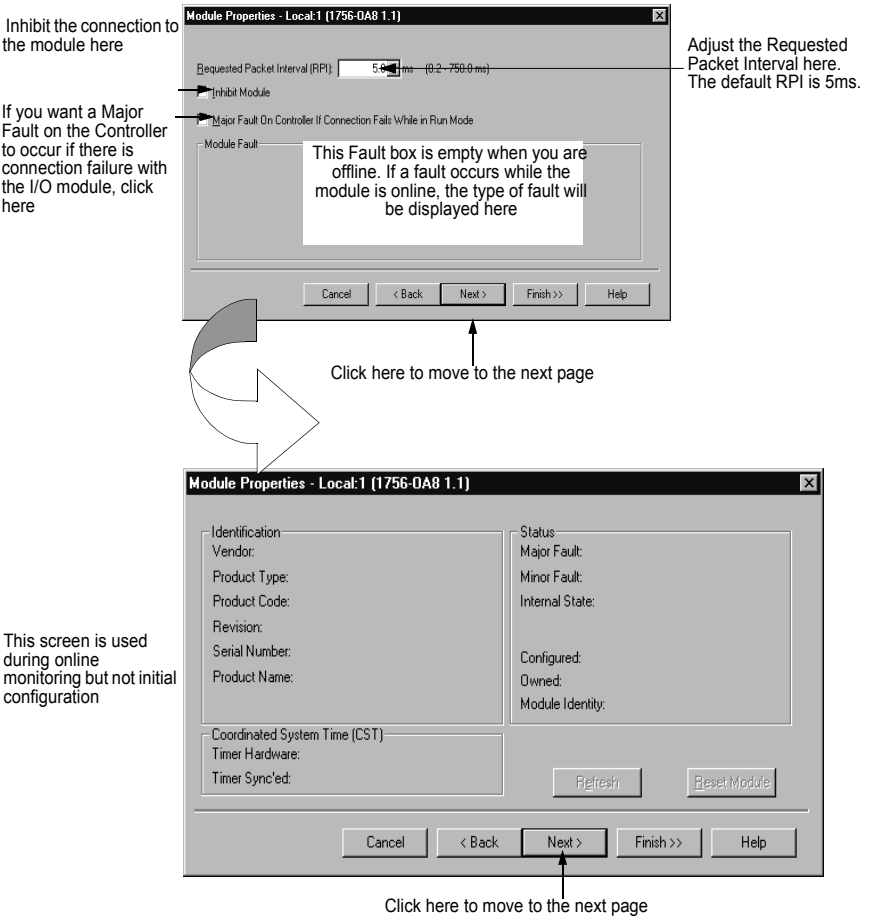


A screen appears with a list of possible new modules for your application. Select a module from the list.

Click **OK**. The new module creation wizard appears. Enter information as follows:

in this field	enter
Name	an optional name
Description	an optional description
Input	
Assembly Instance	1
Size	4
Output	
Assembly Instance	2
Size	5
Configuration	
Assembly Instance	4
Size	0

After you name the page, this screen appears


Inhibit the connection to the module here
If you want a Major Fault on the Controller to occur if there is connection failure with the I/O module, click here
Module Properties - Local:1 (1756-0A8 1.1)
Requested Packet Interval (RPI):
ms (0.2 - 750.0 ms)
Inhibit Module
Major Fault On Controller If Connection Fails While in Run Mode
Module Fault
This Fault box is empty when you are offline. If a fault occurs while the module is online, the type of fault will be displayed here
Cancel
< Back
Next >
Finish >>
Help
Adjust the Requested Packet Interval here. The default RPI is 5ms.
Click here to move to the next page
This screen is used during online monitoring but not initial configuration
Module Properties - Local:1 (1756-0A8 1.1)
Identification
Vendor:
Product Type:
Product Code:
Revision:
Serial Number:
Product Name:
Status
Major Fault:
Minor Fault:
Internal State:
Configured:
Owned:
Module Identity:
Coordinated System Time (CST)
Timer Hardware:
Timer Sync'ed:
Refresh
Reset Module
Cancel
< Back
Next >
Finish >>
Help
Click here to move to the next page

View and Change Module Tags

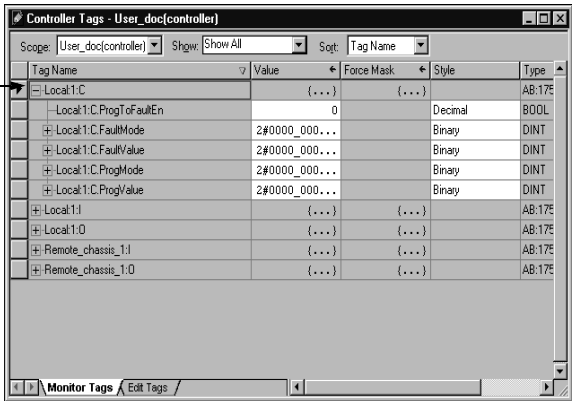
When you create a module, a set of tags are created by the ControlLogix system that can be viewed in the Tag Editor of RSLogix 5000. Each configurable feature on your module has a distinct tag that can be used in the processor's ladder logic.

You can access a module's tags through RSLogix 5000 as shown below.

1. Select Controller Tags.
2. Click on the right mouse button to display the menu.
3. Select Monitor Tags.

You can view the tags from here

Click on the slot number of the module you want to see



Because the process of viewing and changing a module's configuration tags is broader in scope than can be addressed in this chapter, refer to Appendix D for more information and sample tag collections.

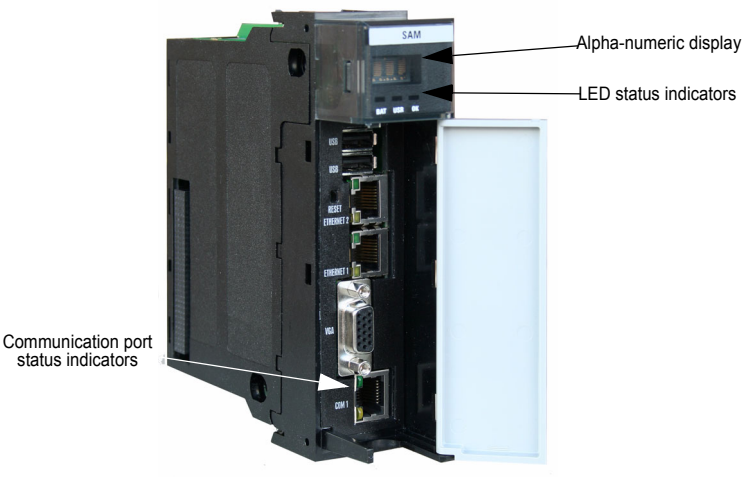
Configure the Module IP Address

Before you can use your 1756-CLX/C module, you must configure its IP address, gateway, and subnet mask by specifying parameters NX00 through NX02 on the Logix5000 controller. Refer to Appendices D and E of this manual for definitions of these parameters.

Status Indicators and Troubleshooting

What This Chapter Contains

This chapter shows you the status indicators on the 1756-CLX/C module, and provides basic troubleshooting procedures.



For information about this topic	See page
Use the LED Status Indicators	5-2
Use the Communications Port Status Indicators	5-3
Use the Alpha-numeric Display	5-3

Use the LED Status Indicators

The 1756-CLX/C module has the following LED status indicators. Use these indicators to troubleshoot module status.:

Table 5.A LED Status Indicators

This LED	When	Means	So you should
BAT (RED)	ON	The battery is low.	Replace the module.
		The battery is charging. The BAT LED turns OFF within a few minutes after power is applied.	Wait for the battery to finish charging.
	OFF	The Battery is charged.	Do nothing. The module is ready for use.
		The module is not powered up.	Apply power to the module.
USR (GREEN)	ON/OFF	Data is being sent or received over the NeXUS port.	Do nothing. The module is operating correctly.
	OFF	No data is being sent or received over the NeXUS port.	Check the Communication port LEDs. If: • LEDs are working properly, restart the module • LEDs are not working properly, follow the instructions in Table 5.B on page 5-3 • the problem persists, replace the module
		The module is not powered up.	Apply power to the module.
OK (STATUS)	GREEN	The module is operating correctly.	Do nothing. The module is ready for use.
	RED	The module has experienced an error.	Restart the module. If the problem persists, replace the module.
	OFF	The module is not powered up.	Apply power to the module.

Use the Communications Port Status Indicators

The 1756-CLX/C module has the following communications port status indicators. Use these indicators to troubleshoot module communication:

Table 5.B Communication Port Status Indicators

This LED	When operating like this, means	So you should
10/100 (GREEN) (Top LED)	• This LED will be ON if 100BASE-TX link is detected and OFF if a 10BASE-T link is detected. If the link fails while in Auto-negotiation, this LED will keep the last valid link state. If the 100BASE-TX link is forced, this LED will be ON, regardless of the link status. • This LED will be OFF if the 10BASE-T link is forced, regardless of the link status.	Do nothing. The module is operating correctly.
ACTIVE (YELLOW) (Bottom LED)	This LED is OFF until a valid link has been detected. After a valid link has been detected, the LED will remain ON, blinking ON and OFF when network activity is detected.	If this link is not valid (LED is OFF), do the following: • Check the Ethernet cable. Replace if necessary • Check the Communications port on the device connected to the module • If the problem persists, replace the module.

Use the Alpha-numeric Display

The 1756-CLX/C module has a 4-character alpha-numeric display on the front panel. Use this display to check system health..

Table 5.C Alpha-numeric Display Indicators

This message on the alpha-numeric display	means that 1756-CLX/C software is	and NX Dlink software is	and an error is present	So you should
RUN	Enabled	Running	No	Do nothing.
ERR	Enabled	Running	Yes	See Table 5.D for error codes.
STOP	Disabled	N/A	N/A	Restart the module. If problem persists, replace the module.
No activity	Disabled	N/A	N/A	Restart the module. If problem persists, replace the module.

Table 5.D Firmware error codes

Error type	Error contents	Alpha-numeric display	NX46_ System error	NX60_ System error code	NX63_ status level	NX64_ Status code	NX61_ Send error code	VX62_ Receive error code	Event log source	User action
Configu-ration Error	Configuration Error	ERR	ON	Error_ Code	N/A	N/A	N/A	N/A	NX SAM	See Table 5.E
System Online Error	NX DLINK is inactive	ERR	ON	0x11008000	E	0x11008000	N/A	N/A	NXDlink	Major Fault
	Data Buffer Overflowed	RUN	OFF	N/A	W	0x11008001	N/A	N/A	NXDlink	Warning
	Data Buffer Upper Limit	RUN	OFF	N/A	E	0x11008002	N/A	N/A	NXDlink	Minor Fault
	Data Buffer Lower Limit	RUN	OFF	N/A	I	0x11008003	N/A	N/A	NXDlink	Informa-tion
	Receive Limit Over of Data Handle	RUN	OFF	N/A	W	0x12008004	N/A	N/A	N/A	Warning
	MC Receive Number has missed	RUN	OFF	N/A	I	0x11008004	N/A	N/A	NXDlink	Informa-tion
	CPU Temp Over Limit	RUN	OFF	N/A	W	0x4e000001	N/A	N/A	NX SAM	Warning
	CPU Temp Upper Limit	RUN	OFF	N/A	E	0x4e000002	N/A	N/A	NX SAM	Minor Fault
Send/ Receive Error	CPU Temp Lower Limit	RUN	OFF	N/A	I	0x4e000003	N/A	N/A	NX SAM	Informa-tion
	Send Error Receive Error	RUN	OFF	N/A	N/A	N/A	See Table 5.F		NXDlink	Individ-ual error for each handle. See Table 5.F.
Module stopped		STOP	OFF	N/A	N/A	N/A	N/A	N/A	N/A	

Table 5.E Module error codes

No.	Error code	Decription	User action
1	0x00000001	Incorrect Data Setting for NX00_Node_Name_param	Correct the Data Setting for NX00_Node_Name_param
2	0x00000002	Incorrect Data Setting for NX01_IP_Address_Param	Correct the Data Setting for NX01_IP_Address_Param
3	0x00000003	Incorrect Data Setting for NX02_Subnet_Mask_Param	Correct the Data Setting for NX02_Subnet_Mask_Param
4	0x00000004	Incorrect Data Setting for NX03_Node_Param[0] “Logical Node Number”	Correct the Data Setting for NX03_Node_Param[0]
5	0x00000005	Incorrect Data Setting for NX03_Node_Param[1] “Local Data Field Number”	Correct the Data Setting for NX03_Node_Param[1]

Table 5.E Module error codes

No.	Error code	Decription	User action
6	0x00000006	Incorrect Data Setting for NX03_Node_Param[2] “Node Mode at start up”	Correct the Data Setting for NX03_Node_Param[2]
7	0x00000007	Incorrect Data Setting for NX03_Node_Param[4] “Message Send Port Number”	Correct the Data Setting for NX03_Node_Param[4]
8	0x00000008	Incorrect Data Setting for NX03_Node_Param[5] “Node Alive Receive Port Number”	Correct the Data Setting for NX03_Node_Param[5]
9	0x00000009	Incorrect Data Setting for NX03_Node_Param[6] “Node Alive Interval”	Correct the Data Setting for NX03_Node_Param[6]
10	0x0000000a	Incorrect Data Setting for NX03_Node_Param[7] “Node Alive Count”	Correct the Data Setting for NX03_Node_Param[7]
11	0x00000010	Multicast_Group_Number is out of range for NX06_Multicast_Group_Param	Correct the Data Number for Entry0~7 Multicast_Group_Number
12	0x00000011	Online Port Number is out of range for NX06_Multicast_Group_Param	Correct the Data Number for Entry0~7 Online Port Number
13	0x00000012	Test Port Number is out of range for NX06_Multicast_Group_Param	Correct the Data Number for Entry0~7 Test Port Number
14	0x00000013	S/R OK Flag Value is out of range for NX06_Multicast_Group_Param	Correct the Data Value for Entry0~7 S/R OK FlagValue
15	0x00000014	Multicast_Group_Number is overlapped for NX06_Multicast_Group_Param	Correct the Data Number for Entry0~7 Multicast_Group_Number
16	0x00000015	Port Number is overlapped	Correct the Port Number for Entry0~7and also check the value for NX03_Node_Param[4] and NX03_Node_Param[5]
17	0x00000090	Low Limit Value is out of range for NX07_Overflow_Param[0] “Low Limit”	Correct the Data Setting for NX07_Overflow_Param[0]
18	0x00000091	High Limit Value is out of range for NX07_Overflow_Param[1] “High Limit”	Correct the Data Setting for NX07_Overflow_Param[1]
19	0x0000FFFF	System has corrupted during the NX Dlink Initialization	Refer to Appendix C, Web Page Diagnostics

Table 5.F Send/receive error codes

No.	Error code	Description	User action
1	0x00000000	Data was sent or received properly	N/A
2	0x81000005	Multicast_Group_Number is not specified or out of range	Correct the the Multicast_Group_Number of the related Handle
3	0x81000006	TCD Number is not specified or out of range	Correct the TCD Number of the related Handle
4	0x82000011	TCD Number is overlapped	Correct the TCD Number of the related Handle
5	0x84000002	Error has occurred when creating the socket or during the socket communication	Consult Rockwell Automation technical support
6	0x84000003	Error has occurred when attaching the common memory	Consult Rockwell Automation technical support

Specifications

Module Location	1756 ControlLogix chassis
Maximum Backplane Current	1A @ 5V dc
Maximum Power Dissipation	5W
Communication Ports	Ethernet 10/100T IEEE 802.3
Battery	Rechargeable Lithium Vanadium Pentoxide
Temperature	Operating: 0 to 60 ° C Storage: 0 to 80 ° C
Form Factor	Single Slot ControlLogix Module
Certifications	UL Recognized Industrial Control Component (pending) CUL (pending) Marked for all applicable directives

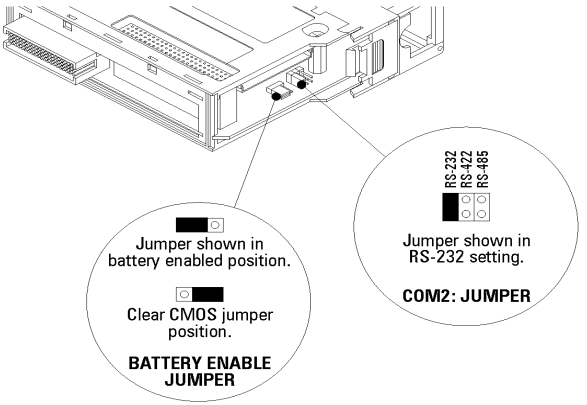
Notes:

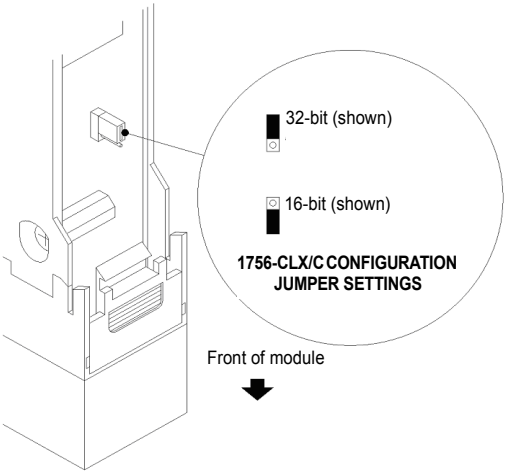
Factory-set Jumpers

Jumpers on the 1756-CLX/C module are factory-set. If you change the jumper settings by mistake, follow this procedure to reset them.

ATTENTION

Do not change the jumper positions. If you change a jumper position by mistake, you must re-set it to the position shown below.




32-bit (shown)
16-bit (shown)
1756-CLX/C CONFIGURATION
JUMPER SETTINGS
Front of module

1756-CLX/C Web Interface

The 1756-CLX/C module's web page offers extensive internal and network diagnostics. To view the web pages, enter the module's IP address into your web browser. You can access the following web pages.

For information about this topic:	See page:
User Screens	C-1

User Screens

Figure C.1 Title screen

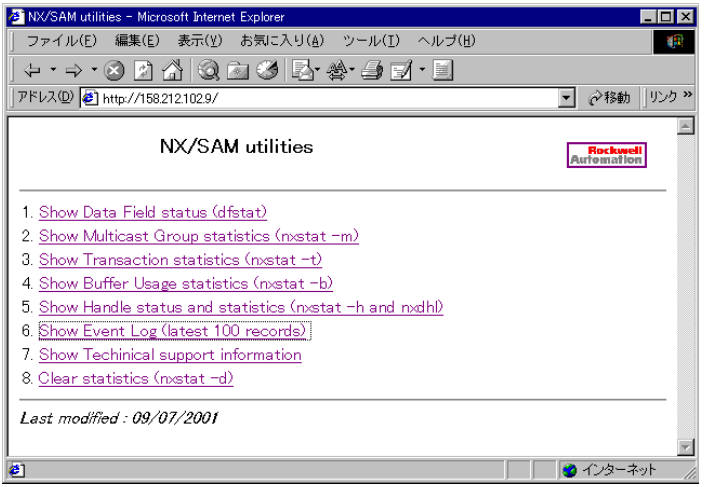

NX/SAM utilities - Microsoft Internet Explorer
ファイル(F) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルプ(H)
アドレス(D) http://158.212.102.9/
移動
リンク
NX/SAM utilities
Rockwell Automation
1. Show Data Field status (dfstat)
2. Show Multicast Group statistics (nxstat -m)
3. Show Transaction statistics (nxstat -t)
4. Show Buffer Usage statistics (nxstat -b)
5. Show Handle status and statistics (nxstat -h and nxdhl)
6. Show Event Log (latest 100 records)
7. Show Techinical support information
8. Clear statistics (nxstat -d)
Last modified : 09/07/2001
インターネット

Figure C.2 Data Field Status screen

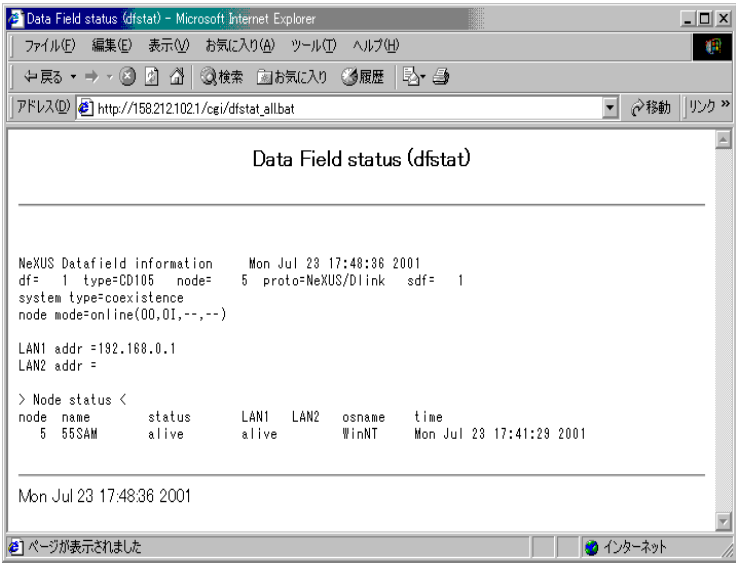

Data Field status (dfstat) - Microsoft Internet Explorer
ファイル(F) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルプ(H)
戻る 検索 お気に入り 履歴
アドレス(D) http://158.212.102.1/cgi/dfstat_all.bat
移動 リンク
Data Field status (dfstat)
NeXUS Datafield information Mon Jul 23 17:48:36 2001
df= 1 type=CD105 node= 5 proto=NeXUS/Dlink sdf= 1
system type=coexistence
node mode=online(OO,OI,--,--)
LAN1 addr =192.168.0.1
LAN2 addr =
> Node status <
node name status LAN1 LAN2 osname time
5 55SAM alive alive WinNT Mon Jul 23 17:41:29 2001
Mon Jul 23 17:48:36 2001
ページが表示されました
インターネット

Figure C.3 Multicast group statistics screen

TIP You can also access this screen by typing **nxstat -m** in a DOS window.

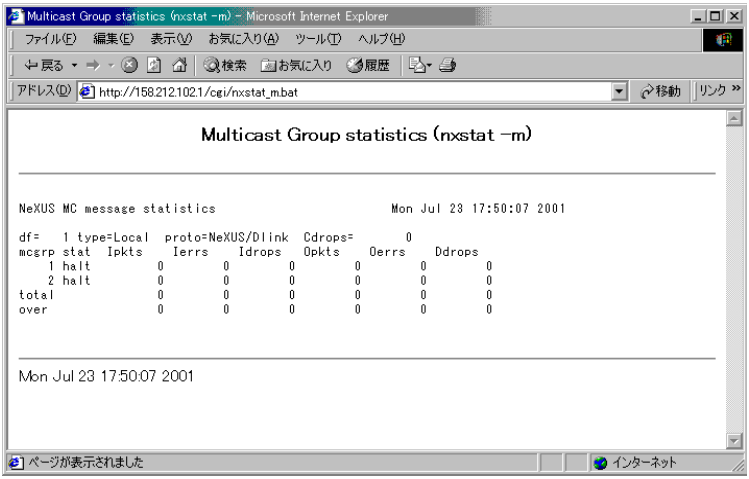

Multicast Group statistics (nxstat -m) - Microsoft Internet Explorer
ファイル(F) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルプ(H)
戻る 検索 お気に入り 履歴
アドレス(D) http://158.212.102.1/cgi/nxstat_m.bat
移動 リンク
Multicast Group statistics (nxstat -m)
NeXUS MC message statistics Mon Jul 23 17:50:07 2001
df= 1 type=Local proto=NeXUS/Dlink Cdrops= 0
mcgrp stat Ipkts Ierrs Idrops Opkts Oerrs Ddrops
1 halt 0 0 0 0 0 0
2 halt 0 0 0 0 0 0
total 0 0 0 0 0 0
over 0 0 0 0 0 0
Mon Jul 23 17:50:07 2001
ページが表示されました
インターネット

Figure C.4 Transaction Statistics screen

TIP You can also access this screen by typing **nxstat -t** in a DOS window.

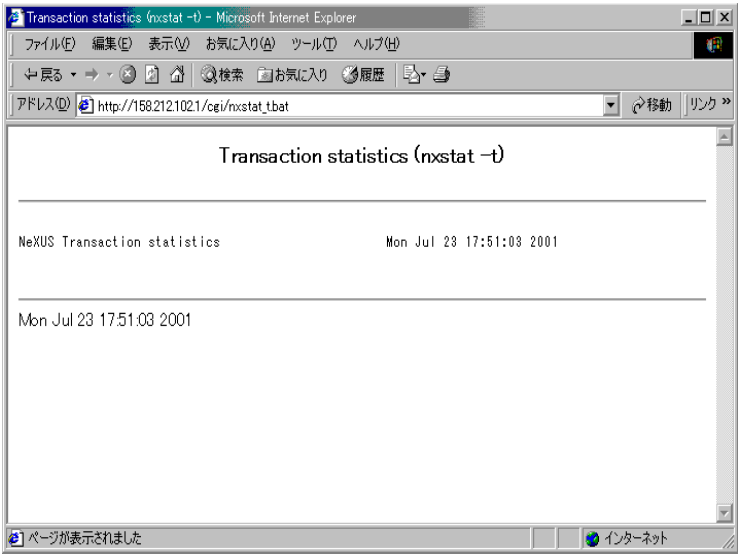

Transaction statistics (nxstat -t) - Microsoft Internet Explorer
ファイル(F) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルプ(H)
戻る 検索 お気に入り 履歴
アドレス(D) http://158.212.102.1/cgi/nxstat_tbat
移動 リンク
Transaction statistics (nxstat -t)
NeXUS Transaction statistics Mon Jul 23 17:51:03 2001
Mon Jul 23 17:51:03 2001
ページが表示されました
インターネット

Figure C.5 Buffer Usage statiscs screen

TIP You can also access this screen by typing **nxstat -b** in a DOS window.

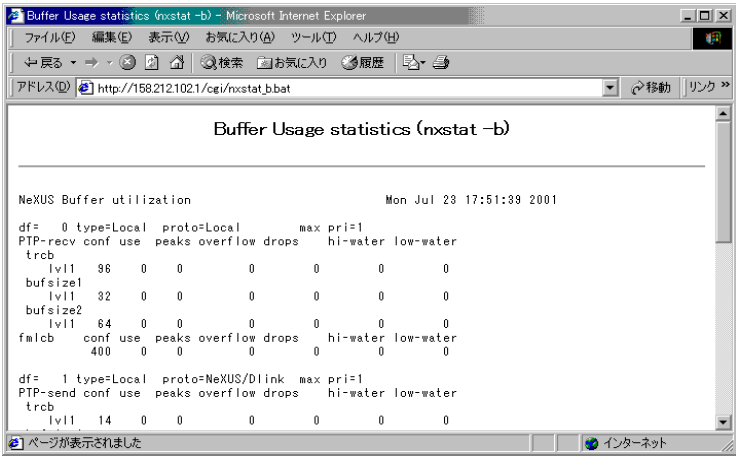

Buffer Usage statistics (nxstat -b) - Microsoft Internet Explorer
ファイル(F) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルプ(H)
戻る 検索 お気に入り 履歴
アドレス(D) http://158.212.102.1/cgi/nxstat_b.bat
移動 リンク
Buffer Usage statistics (nxstat -b)
NeXUS Buffer utilization Mon Jul 23 17:51:39 2001
df= 0 type=Local proto=Local max pri=1
PTP-recv conf use peaks overflow drops hi-water low-water
trcb
lvl1 96 0 0 0 0 0 0
bufsize1
lvl1 32 0 0 0 0 0 0
bufsize2
lvl1 64 0 0 0 0 0 0
fmlcb conf use peaks overflow drops hi-water low-water
400 0 0 0 0 0 0
df= 1 type=Local proto=NeXUS/Dlink max pri=1
PTP-send conf use peaks overflow drops hi-water low-water
trcb
lvl1 14 0 0 0 0 0 0
ページが表示されました
インターネット

Figure C.6 Handle Status and Statistics screen

TIP You can also access this screen by typing **nxstat -h** or nxhdl in a DOS window.

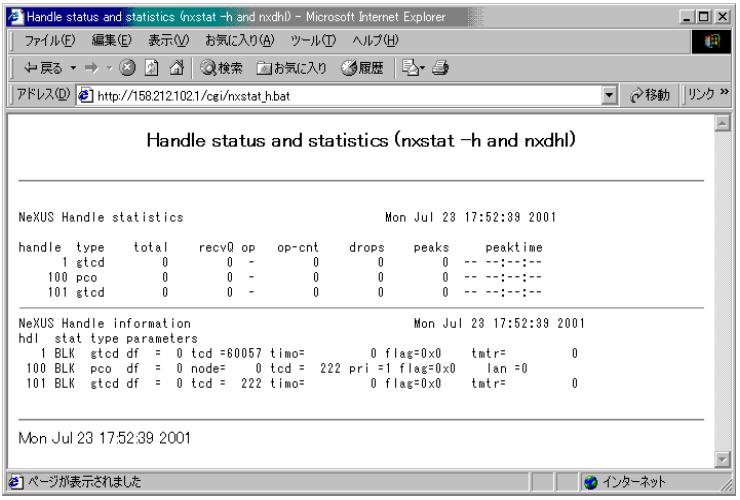

Handle status and statistics (nxstat -h and nxdhl) - Microsoft Internet Explorer
ファイル(F) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルプ(H)
戻る 検索 お気に入り 履歴
アドレス(D) http://158.212.102.1/cgi/nxstat_h.bat
移動 リンク
Handle status and statistics (nxstat -h and nxdhl)
NeXUS Handle statistics Mon Jul 23 17:52:39 2001
handle type total recvQ op op-cnt drops peaks peaktime
1 gtcd 0 0 - 0 0 0 -- --:--:--
100 pco 0 0 - 0 0 0 -- --:--:--
101 gtcd 0 0 - 0 0 0 -- --:--:--
NeXUS Handle information Mon Jul 23 17:52:39 2001
hdl stat type parameters
1 BLK gtcd df = 0 tcd =60057 timo= 0 flag=0x0 tmtr= 0
100 BLK pco df = 0 node= 0 tcd = 222 pri =1 flag=0x0 lan =0
101 BLK gtcd df = 0 tcd = 222 timo= 0 flag=0x0 tmtr= 0
Mon Jul 23 17:52:39 2001
ページが表示されました
インターネット

Figure C.7 Event Log screen

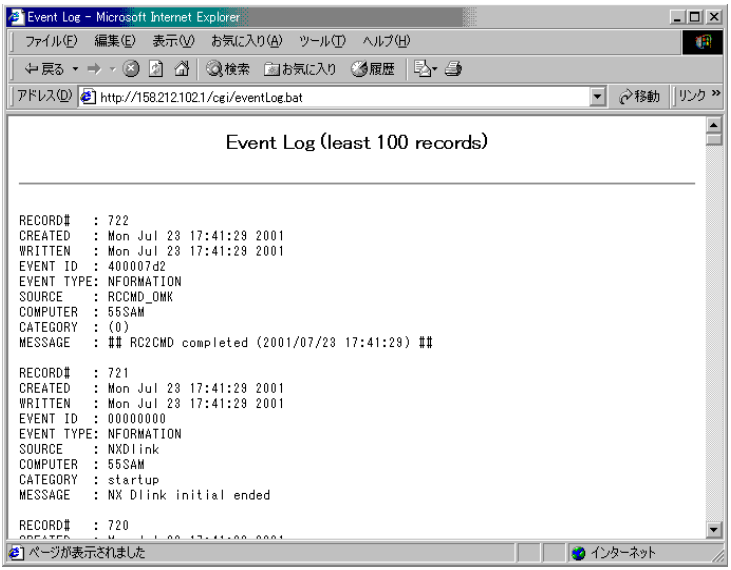

Event Log - Microsoft Internet Explorer
ファイル(F) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルプ(H)
戻る 検索 お気に入り 履歴
アドレス(D) http://158.212.102.1/cgi/eventLog.bat
移動 リンク
Event Log (least 100 records)
RECORD# : 722
CREATED : Mon Jul 23 17:41:29 2001
WRITTEN : Mon Jul 23 17:41:29 2001
EVENT ID : 400007d2
EVENT TYPE: NFORMATION
SOURCE : RCCMD_OMK
COMPUTER : 55SAM
CATEGORY : (0)
MESSAGE : ## RC2CMD completed (2001/07/23 17:41:29) ##
RECORD# : 721
CREATED : Mon Jul 23 17:41:29 2001
WRITTEN : Mon Jul 23 17:41:29 2001
EVENT ID : 00000000
EVENT TYPE: NFORMATION
SOURCE : NXDlink
COMPUTER : 55SAM
CATEGORY : startup
MESSAGE : NX Dlink initial ended
RECORD# : 720
ページが表示されました
インターネット

Figure C.8 Technical Support Information screen

You can access this screen, type in the required information, then send this screen to Technical Support.

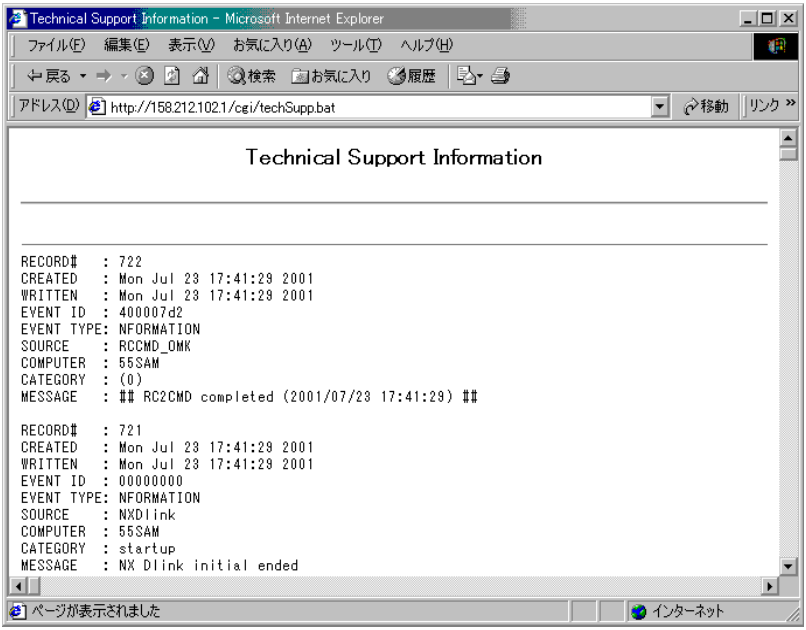
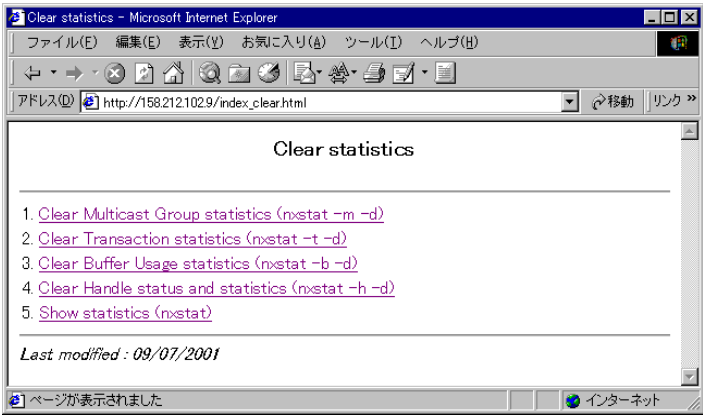

Technical Support Information - Microsoft Internet Explorer
ファイル(F) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルプ(H)
戻る 検索 お気に入り 履歴
アドレス(D) http://158.212.102.1/cgi/techSupp.bat
移動 リンク
Technical Support Information
RECORD# : 722
CREATED : Mon Jul 23 17:41:29 2001
WRITTEN : Mon Jul 23 17:41:29 2001
EVENT ID : 400007d2
EVENT TYPE: NFORMATION
SOURCE : RCCMD_OMK
COMPUTER : 55SAM
CATEGORY : (0)
MESSAGE : ## RC2CMD completed (2001/07/23 17:41:29) ##
RECORD# : 721
CREATED : Mon Jul 23 17:41:29 2001
WRITTEN : Mon Jul 23 17:41:29 2001
EVENT ID : 00000000
EVENT TYPE: NFORMATION
SOURCE : NXDlink
COMPUTER : 55SAM
CATEGORY : startup
MESSAGE : NX Dlink initial ended
ページが表示されました
インターネット

Figure C.9 Clear Statistics screen


Clear statistics - Microsoft Internet Explorer
ファイル(F) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルプ(H)
アドレス(D) http://158.212.102.9/index_clear.html
移動 リンク
Clear statistics
1. Clear Multicast Group statistics (nxstat -m -d)
2. Clear Transaction statistics (nxstat -t -d)
3. Clear Buffer Usage statistics (nxstat -b -d)
4. Clear Handle status and statistics (nxstat -h -d)
5. Show statistics (nxstat)
Last modified : 09/07/2001
ページが表示されました
インターネット

1756-CLX/C Module Backplane Communication Tag List

The 1756-CLX/C module tags NX00 through NX91 are used for backplane (API) communication, and should be defined in your ladder logic exactly as listed in Table D-A in this Appendix. Refer to Appendix F for information on copying the tags and ladder logic files from the .acd file supplied with the 1756-CLX/C module.

For information about this topic:	See page:
About the Nexus Communication Flags (NX20 – NX91)	D-2

ATTENTION

Failure to properly define the module tags NX00 through NX91 may result in unpredictable module operation.

About the Nexus Communication Flags (NX20 – NX91)

Boot /Reboot 1756-CLX/C Module Procedure

The following tags are applied for this sequence. Refer the timing chart for more details.

- NX20_Module_Enable
- NX40_Module_Enabled
- NX47_Module_Ready
- NX48_Module_Enable_Ack

Figure D.1 Boot and Parameter Configuration Timing Chart

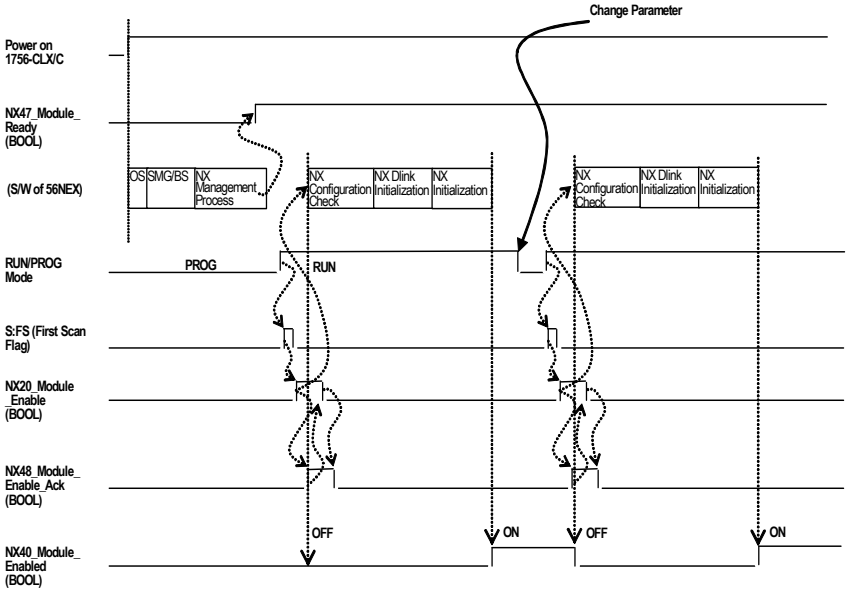
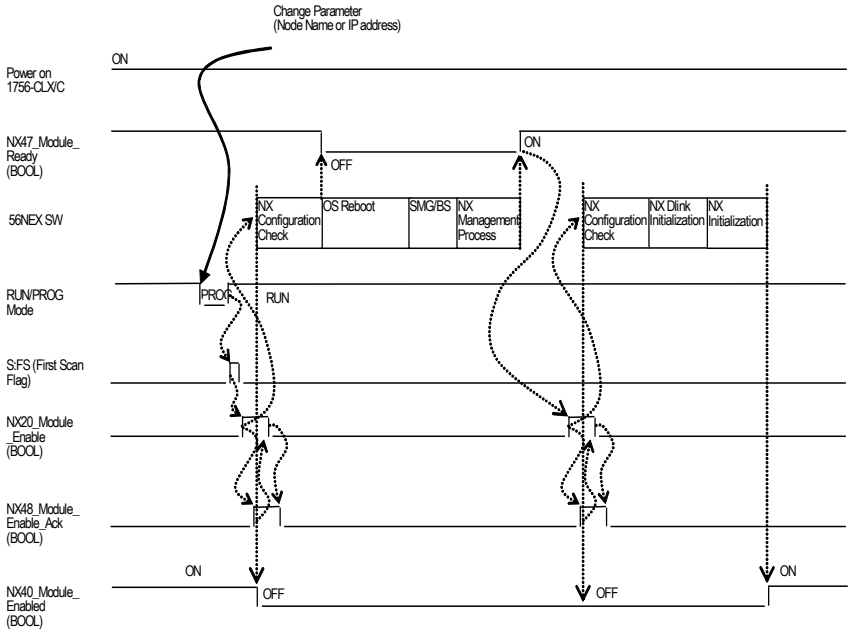


Figure D.2 Operating System Reboot Timing Chart

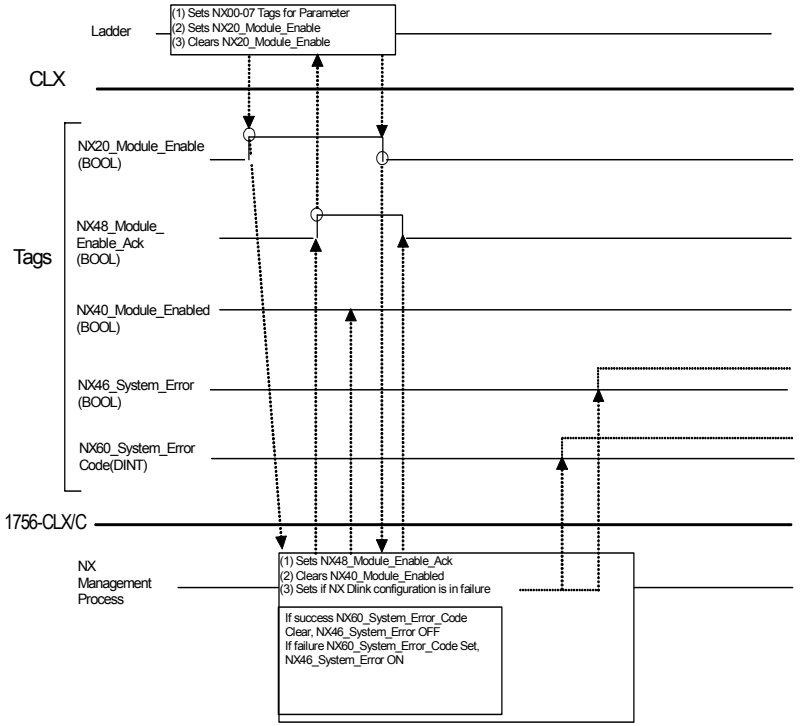


1756-CLX/C Module Configuration Check Procedure

The following tags are applied for this sequence. Refer the timing chart for more details.

- NX20_Module_Enable
- NX40_Module_Enabled
- NX48_Module_Enable_Ack
- NX46_System_Error
- NX60_System_Error_Code

Figure D.3 1756-CLX/C Configuration Check Timing Chart

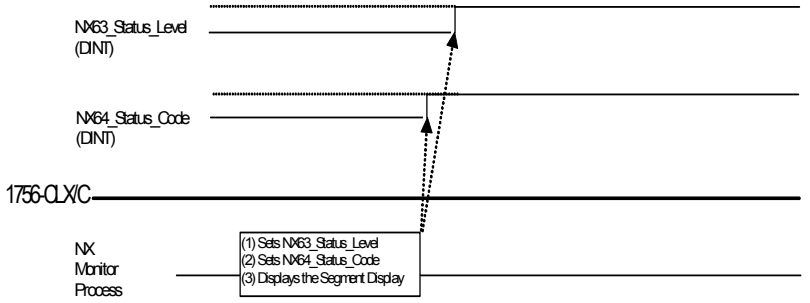


1756-CLX/C System Error Procedure

The following tags are applied for this sequence. Refer the timing chart for more details.

- NX63_Status_Leve
- NX64_Status_Code

Figure D.4 1756-CLX/C System Error Timing Chart

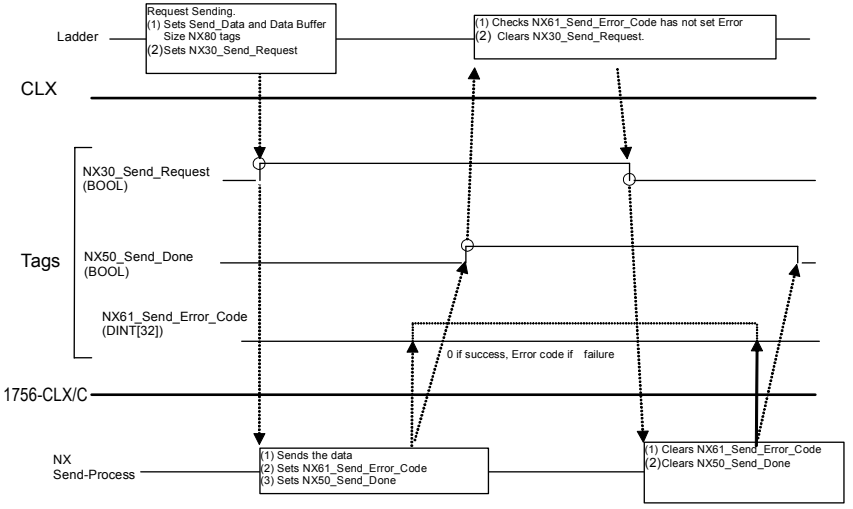


1756-CLX/C Module Sending Procedure

The following tags are applied for this sequence. Refer the timing chart for more details.

- NX30_Send_Request
- NX50_Send_Done
- NX61_Send_Error_Code

Figure D.5 1756-CLX/C Module Sending Procedure Timing Chart



1756-CLX/C Module Receiving Procedure

The following tags are applied for this sequence. Refer the timing chart for more details.

- NX31_Receive_Done
- NX51_Receive_Request
- NX62_Receive_Error_Code

Figure D.6 1756-CLX/C Module Receiving Procedure Timing Chart

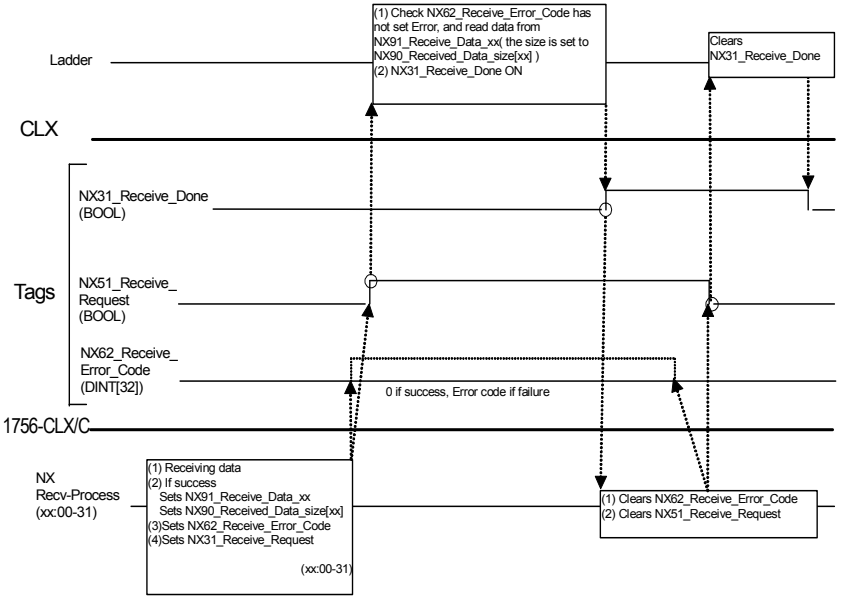


Table D.A Module Backplane Communication Tag List

Tag Name	Data Type	Description	Initial Value
NX00_Node_Name-Param	SINT[10]	Parameters for Node_Name	- - -
NX00_Node_Name_Param[0]	SINT	1st character of Node Name	5
NX00_Node_Name_Param[1]	SINT	2nd character of Node Name	6
NX00_Node_Name_Param[2]	SINT	3rd character of Node Name	N
NX00_Node_Name_Param[3]	SINT	4th character of Node Name	E
NX00_Node_Name_Param[4]	SINT	5th character of Node Name	X
NX00_Node_Name_Param[5]	SINT	6th character of Node Name	(null)
NX00_Node_Name_Param[6]	SINT	7th character of Node Name	(null)
NX00_Node_Name_Param[7]	SINT	8th character of Node Name	(null)
NX00_Node_Name_Param[8]	SINT	9th character of Node Name	(null)
NX00_Node_Name_Param[9]	SINT	10th character of Node Name	(null)
NX01_IP_Address_Param	INT[4]	Parameters for IP_Address	- - -
NX01_IP_Address_Param[0]	INT	1st character of IP Address	192
NX01_IP_Address_Param[1]	INT	2nd character of IP Address	168
NX01_IP_Address_Param[2]	INT	3rd character of IP Address	0
NX01_IP_Address_Param[3]	INT	4th character of IP Address	1
NX02_Subnet_Mask_Param	INT[4]	Parameters for Subnet_Address	- - -
NX02_Subnet_Mask_Param[0]	INT	1st character of Subnet Mask	255
NX02_Subnet_Mask_Param[1]	INT	2nd character of Subnet Mask	255
NX02_Subnet_Mask_Param[2]	INT	3rd character of Subnet Mask	255
NX02_Subnet_Mask_Param[3]	INT	4th character of Subnet Mask	0
NX03_Node_Param	DINT[16]	Parameters related to Node	- - -
NX03_Node_Param[0]	DINT	Logical Node Number <1 to 4095>	1
NX03_Node_Param[1]	DINT	Local Data Field Number <1 to 255>	1
NX03_Node_Param[2]	DINT	Node Mode at Startup	
NX03_Node_Param[3]	DINT	Reserved	0
NX03_Node_Param[4]	DINT	Message Send Port Number <0 - 65535 >	10000
NX03_Node_Param[5]	DINT	Node Alive Receive Port Number <1 - 65534 >	10001
NX03_Node_Param[6]	DINT	Node Alive Interval <1 - 3600>	20
NX03_Node_Param[7]	DINT	Node Alive Count <2 - 100>	4
NX03_Node_Param[8]	DINT	Reserved	0
NX03_Node_Param[9]	DINT	Reserved	0

Table D.A Module Backplane Communication Tag List

Tag Name	Data Type	Description	Initial Value
NX03_Node_Param[10]	DINT	Reserved	0
NX03_Node_Param[11]	DINT	Reserved	0
NX03_Node_Param[12]	DINT	Reserved	0
NX03_Node_Param[13]	DINT	Reserved	0
NX03_Node_Param[14]	DINT	Reserved	0
NX03_Node_Param[15]	DINT	Reserved	0
NX04_Send_Handle_Param	DINT[192]	Parameters related to Send_Handle	- - -
NX04_Send_Handle_Param[0]	DINT	Send 0 ; Reserved	0
NX04_Send_Handle_Param[1]	DINT	Send 0 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[2]	DINT	Send 0 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[3]	DINT	Send 0 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[4]	DINT	Send 0 ; Reserved	0
NX04_Send_Handle_Param[5]	DINT	Send 0 ; Reserved	0
NX04_Send_Handle_Param[6]	DINT	Send 1 ; Reserved	0
NX04_Send_Handle_Param[7]	DINT	Send 1 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[8]	DINT	Send 1 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[9]	DINT	Send 1 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[10]	DINT	Send 1 ; Reserved	0
NX04_Send_Handle_Param[11]	DINT	Send 1 ; Reserved	0
NX04_Send_Handle_Param[12]	DINT	Send 2 ; Reserved	0
NX04_Send_Handle_Param[13]	DINT	Send 2 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[14]	DINT	Send 2 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[15]	DINT	Send 2 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[16]	DINT	Send 2 ; Reserved	0
NX04_Send_Handle_Param[17]	DINT	Send 2 ; Reserved	0
NX04_Send_Handle_Param[18]	DINT	Send 3 ; Reserved	0
NX04_Send_Handle_Param[19]	DINT	Send 3 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[20]	DINT	Send 3 ; Multicast Group Number <1 to 255>	0

Table D.A Module Backplane Communication Tag List

Tag Name	Data Type	Description	Initial Value
NX04_Send_Handle_Param[21]	DINT	Send 3 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[22]	DINT	Send 3 ; Reserved	0
NX04_Send_Handle_Param[23]	DINT	Send 3 ; Reserved	0
NX04_Send_Handle_Param[24]	DINT	Send 4 ; Reserved	0
NX04_Send_Handle_Param[25]	DINT	Send 4 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[26]	DINT	Send 4 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[27]	DINT	Send 4 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[28]	DINT	Send 4 ; Reserved	0
NX04_Send_Handle_Param[29]	DINT	Send 4 ; Reserved	0
NX04_Send_Handle_Param[30]	DINT	Send 5 ; Reserved	0
NX04_Send_Handle_Param[31]	DINT	Send 5 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[32]	DINT	Send 5 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[33]	DINT	Send 5 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[34]	DINT	Send 5 ; Reserved	0
NX04_Send_Handle_Param[35]	DINT	Send 5 ; Reserved	0
NX04_Send_Handle_Param[36]	DINT	Send 6 ; Reserved	0
NX04_Send_Handle_Param[37]	DINT	Send 6 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[38]	DINT	Send 6 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[39]	DINT	Send 6 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[40]	DINT	Send 6 ; Reserved	0
NX04_Send_Handle_Param[41]	DINT	Send 6 ; Reserved	0
NX04_Send_Handle_Param[42]	DINT	Send 7 ; Reserved	0
NX04_Send_Handle_Param[43]	DINT	Send 7 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[44]	DINT	Send 7 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[45]	DINT	Send 7 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[46]	DINT	Send 7 ; Reserved	0
NX04_Send_Handle_Param[47]	DINT	Send 7 ; Reserved	0
NX04_Send_Handle_Param[48]	DINT	Send 8 ; Reserved	0

Table D.A Module Backplane Communication Tag List

Tag Name	Data Type	Description	Initial Value
NX04_Send_Handle_Param[49]	DINT	Send 8 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[50]	DINT	Send 8 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[51]	DINT	Send 8 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[52]	DINT	Send 8 ; Reserved	0
NX04_Send_Handle_Param[53]	DINT	Send 8 ; Reserved	0
NX04_Send_Handle_Param[54]	DINT	Send 9 ; Reserved	0
NX04_Send_Handle_Param[55]	DINT	Send 9 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[56]	DINT	Send 9 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[57]	DINT	Send 9 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[58]	DINT	Send 9 ; Reserved	0
NX04_Send_Handle_Param[59]	DINT	Send 9 ; Reserved	0
NX04_Send_Handle_Param[60]	DINT	Send 10 ; Reserved	0
NX04_Send_Handle_Param[61]	DINT	Send 10 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[62]	DINT	Send 10 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[63]	DINT	Send 10 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[64]	DINT	Send 10 ; Reserved	0
NX04_Send_Handle_Param[65]	DINT	Send 10 ; Reserved	0
NX04_Send_Handle_Param[66]	DINT	Send 11 ; Reserved	0
NX04_Send_Handle_Param[67]	DINT	Send 11 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[68]	DINT	Send 11 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[69]	DINT	Send 11 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[70]	DINT	Send 11 ; Reserved	0
NX04_Send_Handle_Param[71]	DINT	Send 11 ; Reserved	0
NX04_Send_Handle_Param[72]	DINT	Send 12 ; Reserved	0
NX04_Send_Handle_Param[73]	DINT	Send 12 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[74]	DINT	Send 12 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[75]	DINT	Send 12 ; Data Size <0 to 1024>	1024

Table D.A Module Backplane Communication Tag List

Tag Name	Data Type	Description	Initial Value
NX04_Send_Handle_Param[76]	DINT	Send 12 ; Reserved	0
NX04_Send_Handle_Param[77]	DINT	Send 12 ; Reserved	0
NX04_Send_Handle_Param[78]	DINT	Send 13 ; Reserved	0
NX04_Send_Handle_Param[79]	DINT	Send 13 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[80]	DINT	Send 13 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[81]	DINT	Send 13 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[82]	DINT	Send 13 ; Reserved	0
NX04_Send_Handle_Param[83]	DINT	Send 13 ; Reserved	0
NX04_Send_Handle_Param[84]	DINT	Send 14 ; Reserved	0
NX04_Send_Handle_Param[85]	DINT	Send 14 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[86]	DINT	Send 14 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[87]	DINT	Send 14 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[88]	DINT	Send 14 ; Reserved	0
NX04_Send_Handle_Param[89]	DINT	Send 14 ; Reserved	0
NX04_Send_Handle_Param[90]	DINT	Send 15 ; Reserved	0
NX04_Send_Handle_Param[91]	DINT	Send 15 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[92]	DINT	Send 15 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[93]	DINT	Send 15 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[94]	DINT	Send 15 ; Reserved	0
NX04_Send_Handle_Param[95]	DINT	Send 15 ; Reserved	0
NX04_Send_Handle_Param[96]	DINT	Send 16 ; Reserved	0
NX04_Send_Handle_Param[97]	DINT	Send 16 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[98]	DINT	Send 16 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[99]	DINT	Send 16 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[100]	DINT	Send 16 ; Reserved	0
NX04_Send_Handle_Param[101]	DINT	Send 16 ; Reserved	0
NX04_Send_Handle_Param[102]	DINT	Send 17 ; Reserved	0
NX04_Send_Handle_Param[103]	DINT	Send 17 ; Transaction Code <1 to 59999> <0=Not used>	0

Table D.A Module Backplane Communication Tag List

Tag Name	Data Type	Description	Initial Value
NX04_Send_Handle_Param[104]	DINT	Send 17 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[105]	DINT	Send 17 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[106]	DINT	Send 17 ; Reserved	0
NX04_Send_Handle_Param[107]	DINT	Send 17 ; Reserved	0
NX04_Send_Handle_Param[108]	DINT	Send 18 ; Reserved	0
NX04_Send_Handle_Param[109]	DINT	Send 18 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[110]	DINT	Send 18 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[111]	DINT	Send 18 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[112]	DINT	Send 18 ; Reserved	0
NX04_Send_Handle_Param[113]	DINT	Send 18 ; Reserved	0
NX04_Send_Handle_Param[114]	DINT	Send 19 ; Reserved	0
NX04_Send_Handle_Param[115]	DINT	Send 19 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[116]	DINT	Send 19 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[117]	DINT	Send 19 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[118]	DINT	Send 19 ; Reserved	0
NX04_Send_Handle_Param[119]	DINT	Send 19 ; Reserved	0
NX04_Send_Handle_Param[120]	DINT	Send 20 ; Reserved	0
NX04_Send_Handle_Param[121]	DINT	Send 20 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[122]	DINT	Send 20 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[123]	DINT	Send 20 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[124]	DINT	Send 20 ; Reserved	0
NX04_Send_Handle_Param[125]	DINT	Send 20 ; Reserved	0
NX04_Send_Handle_Param[126]	DINT	Send 21 ; Reserved	0
NX04_Send_Handle_Param[127]	DINT	Send 21 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[128]	DINT	Send 21 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[129]	DINT	Send 21 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[130]	DINT	Send 21 ; Reserved	0
NX04_Send_Handle_Param[131]	DINT	Send 21 ; Reserved	0

Table D.A Module Backplane Communication Tag List

Tag Name	Data Type	Description	Initial Value
NX04_Send_Handle_Param[132]	DINT	Send 22 ; Reserved	0
NX04_Send_Handle_Param[133]	DINT	Send 22 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[134]	DINT	Send 22 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[135]	DINT	Send 22 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[136]	DINT	Send 22 ; Reserved	0
NX04_Send_Handle_Param[137]	DINT	Send 22 ; Reserved	0
NX04_Send_Handle_Param[138]	DINT	Send 23 ; Reserved	0
NX04_Send_Handle_Param[139]	DINT	Send 23 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[140]	DINT	Send 23 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[141]	DINT	Send 23 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[142]	DINT	Send 23 ; Reserved	0
NX04_Send_Handle_Param[143]	DINT	Send 23 ; Reserved	0
NX04_Send_Handle_Param[144]	DINT	Send 24 ; Reserved	0
NX04_Send_Handle_Param[145]	DINT	Send 24 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[146]	DINT	Send 24 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[147]	DINT	Send 24 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[148]	DINT	Send 24 ; Reserved	0
NX04_Send_Handle_Param[149]	DINT	Send 24 ; Reserved	0
NX04_Send_Handle_Param[150]	DINT	Send 25 ; Reserved	0
NX04_Send_Handle_Param[151]	DINT	Send 25 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[152]	DINT	Send 25 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[153]	DINT	Send 25 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[154]	DINT	Send 25 ; Reserved	0
NX04_Send_Handle_Param[155]	DINT	Send 25 ; Reserved	0
NX04_Send_Handle_Param[156]	DINT	Send 26 ; Reserved	0
NX04_Send_Handle_Param[157]	DINT	Send 26 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[158]	DINT	Send 26 ; Multicast Group Number <1 to 255>	0

Table D.A Module Backplane Communication Tag List

Tag Name	Data Type	Description	Initial Value
NX04_Send_Handle_Param[159]	DINT	Send 26 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[160]	DINT	Send 26 ; Reserved	0
NX04_Send_Handle_Param[161]	DINT	Send 26 ; Reserved	0
NX04_Send_Handle_Param[162]	DINT	Send 27 ; Reserved	0
NX04_Send_Handle_Param[163]	DINT	Send 27 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[164]	DINT	Send 27 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[165]	DINT	Send 27 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[166]	DINT	Send 27 ; Reserved	0
NX04_Send_Handle_Param[167]	DINT	Send 27 ; Reserved	0
NX04_Send_Handle_Param[168]	DINT	Send 28 ; Reserved	0
NX04_Send_Handle_Param[169]	DINT	Send 28 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[170]	DINT	Send 28 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[171]	DINT	Send 28 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[172]	DINT	Send 28 ; Reserved	0
NX04_Send_Handle_Param[173]	DINT	Send 28 ; Reserved	0
NX04_Send_Handle_Param[174]	DINT	Send 29 ; Reserved	0
NX04_Send_Handle_Param[175]	DINT	Send 29 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[176]	DINT	Send 29 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[177]	DINT	Send 29 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[178]	DINT	Send 29 ; Reserved	0
NX04_Send_Handle_Param[179]	DINT	Send 29 ; Reserved	0
NX04_Send_Handle_Param[180]	DINT	Send 30 ; Reserved	0
NX04_Send_Handle_Param[181]	DINT	Send 30 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[182]	DINT	Send 30 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[183]	DINT	Send 30 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[184]	DINT	Send 30 ; Reserved	0
NX04_Send_Handle_Param[185]	DINT	Send 30 ; Reserved	0
NX04_Send_Handle_Param[186]	DINT	Send 31 ; Reserved	0

Table D.A Module Backplane Communication Tag List

Tag Name	Data Type	Description	Initial Value
NX04_Send_Handle_Param[187]	DINT	Send 31 ; Transaction Code <1 to 59999> <0=Not used>	0
NX04_Send_Handle_Param[188]	DINT	Send 31 ; Multicast Group Number <1 to 255>	0
NX04_Send_Handle_Param[189]	DINT	Send 31 ; Data Size <0 to 1024>	1024
NX04_Send_Handle_Param[190]	DINT	Send 31 ; Reserved	0
NX04_Send_Handle_Param[191]	DINT	Send 31 ; Reserved	0
NX05_Receive_Handle_Param	DINT[128]	Parameters related to Receive_Handle	- - -
NX05_Receive_Handle_Param[0]	DINT	Receive 0 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[1]	DINT	Receive 0 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[2]	DINT	Receive 0 ; Reserved	0
NX05_Receive_Handle_Param[3]	DINT	Receive 0 ; Reserved	0
NX05_Receive_Handle_Param[4]	DINT	Receive 1 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[5]	DINT	Receive 1 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[6]	DINT	Receive 1 ; Reserved	0
NX05_Receive_Handle_Param[7]	DINT	Receive 1 ; Reserved	0
NX05_Receive_Handle_Param[8]	DINT	Receive 2 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[9]	DINT	Receive 2 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[10]	DINT	Receive 2 ; Reserved	0
NX05_Receive_Handle_Param[11]	DINT	Receive 2 ; Reserved	0
NX05_Receive_Handle_Param[12]	DINT	Receive 3 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[13]	DINT	Receive 3 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[14]	DINT	Receive 3 ; Reserved	0
NX05_Receive_Handle_Param[15]	DINT	Receive 3 ; Reserved	0
NX05_Receive_Handle_Param[16]	DINT	Receive 4 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[17]	DINT	Receive 4 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[18]	DINT	Receive 4 ; Reserved	0
NX05_Receive_Handle_Param[19]	DINT	Receive 4 ; Reserved	0
NX05_Receive_Handle_Param[20]	DINT	Receive 5 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[21]	DINT	Receive 5 ; Data Size <0 to 1024>	1024

Table D.A Module Backplane Communication Tag List

Tag Name	Data Type	Description	Initial Value
NX05_Receive_Handle_Param[22]	DINT	Receive 5 ; Reserved	0
NX05_Receive_Handle_Param[23]	DINT	Receive 5 ; Reserved	0
NX05_Receive_Handle_Param[24]	DINT	Receive 6 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[25]	DINT	Receive 6 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[26]	DINT	Receive 6 ; Reserved	0
NX05_Receive_Handle_Param[27]	DINT	Receive 6 ; Reserved	0
NX05_Receive_Handle_Param[28]	DINT	Receive 7 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[29]	DINT	Receive 7 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[30]	DINT	Receive 7 ; Reserved	0
NX05_Receive_Handle_Param[31]	DINT	Receive 7 ; Reserved	0
NX05_Receive_Handle_Param[32]	DINT	Receive 8 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[33]	DINT	Receive 8 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[34]	DINT	Receive 8 ; Reserved	0
NX05_Receive_Handle_Param[35]	DINT	Receive 8 ; Reserved	0
NX05_Receive_Handle_Param[36]	DINT	Receive 9 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[37]	DINT	Receive 9 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[38]	DINT	Receive 9 ; Reserved	0
NX05_Receive_Handle_Param[39]	DINT	Receive 9 ; Reserved	0
NX05_Receive_Handle_Param[40]	DINT	Receive 10 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[41]	DINT	Receive 10 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[42]	DINT	Receive 10 ; Reserved	0
NX05_Receive_Handle_Param[43]	DINT	Receive 10 ; Reserved	0
NX05_Receive_Handle_Param[44]	DINT	Receive 11 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[45]	DINT	Receive 11 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[46]	DINT	Receive 11 ; Reserved	0
NX05_Receive_Handle_Param[47]	DINT	Receive 11 ; Reserved	0
NX05_Receive_Handle_Param[48]	DINT	Receive 12 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[49]	DINT	Receive 12 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[50]	DINT	Receive 12 ; Reserved	0

Table D.A Module Backplane Communication Tag List

Tag Name	Data Type	Description	Initial Value
NX05_Receive_Handle_Param[51]	DINT	Receive 12 ; Reserved	0
NX05_Receive_Handle_Param[52]	DINT	Receive 13 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[53]	DINT	Receive 13 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[54]	DINT	Receive 13 ; Reserved	0
NX05_Receive_Handle_Param[55]	DINT	Receive 13 ; Reserved	0
NX05_Receive_Handle_Param[56]	DINT	Receive 14 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[57]	DINT	Receive 14 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[58]	DINT	Receive 14 ; Reserved	0
NX05_Receive_Handle_Param[59]	DINT	Receive 14 ; Reserved	0
NX05_Receive_Handle_Param[60]	DINT	Receive 15 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[61]	DINT	Receive 15 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[62]	DINT	Receive 15 ; Reserved	0
NX05_Receive_Handle_Param[63]	DINT	Receive 15 ; Reserved	0
NX05_Receive_Handle_Param[64]	DINT	Receive 16 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[65]	DINT	Receive 16 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[66]	DINT	Receive 16; Reserved	0
NX05_Receive_Handle_Param[67]	DINT	Receive 16 ; Reserved	0
NX05_Receive_Handle_Param[68]	DINT	Receive 17 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[69]	DINT	Receive 17 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[70]	DINT	Receive 17 ; Reserved	0
NX05_Receive_Handle_Param[71]	DINT	Receive 17 ; Reserved	0
NX05_Receive_Handle_Param[72]	DINT	Receive 18 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[73]	DINT	Receive 18 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[74]	DINT	Receive 18 ; Reserved	0
NX05_Receive_Handle_Param[75]	DINT	Receive 18 ; Reserved	0
NX05_Receive_Handle_Param[76]	DINT	Receive 19 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[77]	DINT	Receive 19 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[78]	DINT	Receive 19 ; Reserved	0
NX05_Receive_Handle_Param[79]	DINT	Receive 19 ; Reserved	0

Table D.A Module Backplane Communication Tag List

Tag Name	Data Type	Description	Initial Value
NX05_Receive_Handle_Param[80]	DINT	Receive 20 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[81]	DINT	Receive 20 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[82]	DINT	Receive 20 ; Reserved	0
NX05_Receive_Handle_Param[83]	DINT	Receive 20 ; Reserved	0
NX05_Receive_Handle_Param[84]	DINT	Receive 21 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[85]	DINT	Receive 21 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[86]	DINT	Receive 21 ; Reserved	0
NX05_Receive_Handle_Param[87]	DINT	Receive 21 ; Reserved	0
NX05_Receive_Handle_Param[88]	DINT	Receive 22 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[89]	DINT	Receive 22 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[90]	DINT	Receive 22 ; Reserved	0
NX05_Receive_Handle_Param[91]	DINT	Receive 22 ; Reserved	0
NX05_Receive_Handle_Param[92]	DINT	Receive 23 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[93]	DINT	Receive 23 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[94]	DINT	Receive 23 ; Reserved	0
NX05_Receive_Handle_Param[95]	DINT	Receive 23 ; Reserved	0
NX05_Receive_Handle_Param[96]	DINT	Receive 24 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[97]	DINT	Receive 24 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[98]	DINT	Receive 24 ; Reserved	0
NX05_Receive_Handle_Param[99]	DINT	Receive 24 ; Reserved	0
NX05_Receive_Handle_Param[100]	DINT	Receive 25 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[101]	DINT	Receive 25 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[102]	DINT	Receive 25 ; Reserved	0
NX05_Receive_Handle_Param[103]	DINT	Receive 25 ; Reserved	0
NX05_Receive_Handle_Param[104]	DINT	Receive 26 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[105]	DINT	Receive 26 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[106]	DINT	Receive 26 ; Reserved	0
NX05_Receive_Handle_Param[107]	DINT	Receive 26 ; Reserved	0

Table D.A Module Backplane Communication Tag List

Tag Name	Data Type	Description	Initial Value
NX05_Receive_Handle_Param[108]	DINT	Receive 27 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[109]	DINT	Receive 27 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[110]	DINT	Receive 27 ; Reserved	0
NX05_Receive_Handle_Param[111]	DINT	Receive 27 ; Reserved	0
NX05_Receive_Handle_Param[112]	DINT	Receive 28 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[113]	DINT	Receive 28 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[114]	DINT	Receive 28 ; Reserved	0
NX05_Receive_Handle_Param[115]	DINT	Receive 28 ; Reserved	0
NX05_Receive_Handle_Param[116]	DINT	Receive 29 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[117]	DINT	Receive 29 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[118]	DINT	Receive 29 ; Reserved	0
NX05_Receive_Handle_Param[119]	DINT	Receive 29 ; Reserved	0
NX05_Receive_Handle_Param[120]	DINT	Receive 30 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[121]	DINT	Receive 30 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[122]	DINT	Receive 30 ; Reserved	0
NX05_Receive_Handle_Param[123]	DINT	Receive 30 ; Reserved	0
NX05_Receive_Handle_Param[124]	DINT	Receive 31 ; Transaction Code <1 to 59999> <0=Not used>	0
NX05_Receive_Handle_Param[125]	DINT	Receive 31 ; Data Size <0 to 1024>	1024
NX05_Receive_Handle_Param[126]	DINT	Receive 31 ; Reserved	0
NX05_Receive_Handle_Param[127]	DINT	Receive 31 ; Reserved	0
NX06_Multicast_Group_Param	DINT[32]	Parameters related to Multicast_Group	- - -
NX06_Multicast_Group_Param[0]	DINT	Entry 0 ; Multicast Group # <1 to 255>	0
NX06_Multicast_Group_Param[1]	DINT	Entry 0 ; Port # for Online Mode <1 to 65535>	0
NX06_Multicast_Group_Param[2]	DINT	Entry 0 ; Port # for Test Mode <1 to 65535>	0
NX06_Multicast_Group_Param[3]	DINT	Entry 0 ; S/R OK Flag <1=Send / Receive OK, 0=Send only>"	0
NX06_Multicast_Group_Param[4]	DINT	Entry 1 ; Multicast Group # <1 to 255>	0
NX06_Multicast_Group_Param[5]	DINT	Entry 1 ; Port # for Online Mode <1 to 65535>	0

Table D.A Module Backplane Communication Tag List

Tag Name	Data Type	Description	Initial Value
NX06_Multicast_Group_Param[6]	DINT	Entry 1 ; Port # for Test Mode <1 to 65535>	0
NX06_Multicast_Group_Param[7]	DINT	Entry 1 ; S/R OK Flag <1=Send / Receive OK, 0=Send only>	0
NX06_Multicast_Group_Param[8]	DINT	Entry 2 ; Multicast Group # <1 to 255>	0
NX06_Multicast_Group_Param[9]	DINT	Entry 2 ; Port # for Online Mode <1 to 65535>	0
NX06_Multicast_Group_Param[10]	DINT	Entry 2 ; Port # for Test Mode <1 to 65535>	0
NX06_Multicast_Group_Param[11]	DINT	Entry 2 ; S/R OK Flag <1=Send / Receive OK, 0=Send only>	0
NX06_Multicast_Group_Param[12]	DINT	Entry 3 ; Multicast Group # <1 to 255>	0
NX06_Multicast_Group_Param[13]	DINT	Entry 3 ; Port # for Online Mode <1 to 65535>	0
NX06_Multicast_Group_Param[14]	DINT	Entry 3 ; Port # for Test Mode <1 to 65535>	0
NX06_Multicast_Group_Param[15]	DINT	Entry 3 ; S/R OK Flag <1=Send / Receive OK, 0=Send only>	0
NX06_Multicast_Group_Param[16]	DINT	Entry 4 ; Multicast Group # <1 to 255>	0
NX06_Multicast_Group_Param[17]	DINT	Entry 4 ; Port # for Online Mode <1 to 65535>	0
NX06_Multicast_Group_Param[18]	DINT	Entry 4 ; Port # for Test Mode <1 to 65535>	0
NX06_Multicast_Group_Param[19]	DINT	Entry 4 ; S/R OK Flag <1=Send / Receive OK, 0=Send only>	0
NX06_Multicast_Group_Param[20]	DINT	Entry 5 ; Multicast Group # <1 to 255>	0
NX06_Multicast_Group_Param[21]	DINT	Entry 5 ; Port # for Online Mode <1 to 65535>	0
NX06_Multicast_Group_Param[22]	DINT	Entry 5 ; Port # for Test Mode <1 to 65535>	0
NX06_Multicast_Group_Param[23]	DINT	Entry 5 ; S/R OK Flag <1=Send / Receive OK, 0=Send only>	0
NX06_Multicast_Group_Param[24]	DINT	Entry 6 ; Multicast Group # <1 to 255>	0
NX06_Multicast_Group_Param[25]	DINT	Entry 6 ; Port # for Online Mode <1 to 65535>	0
NX06_Multicast_Group_Param[26]	DINT	Entry 6 ; Port # for Test Mode <1 to 65535>	0
NX06_Multicast_Group_Param[27]	DINT	Entry 6 ; S/R OK Flag <1=Send / Receive OK, 0=Send only>	0
NX06_Multicast_Group_Param[28]	DINT	Entry 7 ; Multicast Group # <1 to 255>	0

Table D.A Module Backplane Communication Tag List

Tag Name	Data Type	Description	Initial Value
NX06_Multicast_Group_Param[29]	DINT	Entry 7 ; Port # for Online Mode <1 to 65535>	0
NX06_Multicast_Group_Param[30]	DINT	Entry 7 ; Port # for Test Mode <1 to 65535>	0
NX06_Multicast_Group_Param[31]	DINT	Entry 7 ; S/R OK Flag <1=Send / Receive OK, 0=Send only>	0
NX07_Overflow_Param[0]	DINT	Low Limit <1 to 98>	60
NX07_Overflow_Param[1]	DINT	High Limit <2 to 98>	90
NX07_Overflow_Param[2]	DINT	Reserved	0
NX07_Overflow_Param[3]	DINT	Reserved	0
NX20_Module_Enable	BOOL	1=Enable <<Alias for Local:1:O. Data[1].0 >>	
NX30_Send_Request	DINT	Send_Request 0-31 <<Alias for Local:1:O. Data[2] >>	
NX31_Receive_Done	DINT	Receive_Done 0-31 <<Alias for Local:1:O. Data[3] >>"	
NX32_CPU_Slot_Number	DINT	CPU Board Slot Number <<Alias for Local:1:O. Data[4] >>"	
NX40_Module_Enabled	BOOL	1 = Module Enabled <<Alias for Local:1:I. Data[1].0 >>	
NX42_Operation_Mode	BOOL	1 = Online Mode, 0 = Test Mode" <<Alias for Local:1:I. Data[1].2 >>	
NX46_System_Error	BOOL	1 = Error Occured, 0 = No Error <<Alias for Local:1:I. Data[1].6 >>"	
NX47_Module_Ready	BOOL	1 = Nexus Module Ready <<Alias for Local:1:I. Data[1].7 >>	
NX48_Module_Enable_Ack	BOOL	1 = Module Enable Acknowledged <<Alias for Local:1:I. Data[1].8 >>	
NX50_Send_Done	DINT	Send_Done 0 -31 <<Alias for Local:1:I. Data[2] >>	
NX51_Receive_Request	DINT	Receive_ Request 0-31 <<Alias for Local:1:I. Data[3] >>	
NX60_System_Error_Code	DINT	System Error Code	
NX61_Send_Error_Code	DINT[32]	Send Handle Error Code 0-31	
NX62_Receive_Error_Code	DINT[32]	Receive Handle Error Code 0-31	
NX63_Status_Level	DINT	Status Level ; 1=Information, 2=Warning, 3=Error	
NX64_Status_Code	DINT	Status Code	
NX80_Send_Data_00	INT[512]	Send 0 ; Data Buffer / Size < Max INT[512] >	

Table D.A Module Backplane Communication Tag List

Tag Name	Data Type	Description	Initial Value
NX80_Send_Data_01	INT[512]	Send 1 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_02	INT[512]	Send 2 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_03	INT[512]	Send 3 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_04	INT[512]	Send 4 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_05	INT[512]	Send 5 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_06	INT[512]	Send 6 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_07	INT[512]	Send 7 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_08	INT[512]	Send 8 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_09	INT[512]	Send 9 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_10	INT[512]	Send 10 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_11	INT[512]	Send 11 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_12	INT[512]	Send 12 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_13	INT[512]	Send 13 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_14	INT[512]	Send 14 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_15	INT[512]	Send 15 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_16	INT[512]	Send 16 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_17	INT[512]	Send 17 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_18	INT[512]	Send 18 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_19	INT[512]	Send 19 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_20	INT[512]	Send 20 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_21	INT[512]	Send 21 ; Data Buffer / Size < Max INT[512] >	

Table D.A Module Backplane Communication Tag List

Tag Name	Data Type	Description	Initial Value
NX80_Send_Data_22	INT[512]	Send 22 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_23	INT[512]	Send 23 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_24	INT[512]	Send 24 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_25	INT[512]	Send 25 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_26	INT[512]	Send 26 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_27	INT[512]	Send 27 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_28	INT[512]	Send 28 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_29	INT[512]	Send 29 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_30	INT[512]	Send 30 ; Data Buffer / Size < Max INT[512] >	
NX80_Send_Data_31	INT[512]	Send 31 ; Data Buffer / Size < Max INT[512] >	
NX90_Received_Data_Size	DINT[32]	This shows actual received data size for Handle 0-31	
NX90_Received_Data_Size[0]	DINT	Actual Received Data Size for Handle 0	
NX90_Received_Data_Size[1]	DINT	Actual Received Data Size for Handle 1	
NX90_Received_Data_Size[2]	DINT	Actual Received Data Size for Handle 2	
NX90_Received_Data_Size[3]	DINT	Actual Received Data Size for Handle 3	
NX90_Received_Data_Size[4]	DINT	Actual Received Data Size for Handle 4	
NX90_Received_Data_Size[5]	DINT	Actual Received Data Size for Handle 5	
NX90_Received_Data_Size[6]	DINT	Actual Received Data Size for Handle 6	
NX90_Received_Data_Size[7]	DINT	Actual Received Data Size for Handle 7	
NX90_Received_Data_Size[8]	DINT	Actual Received Data Size for Handle 8	
NX90_Received_Data_Size[9]	DINT	Actual Received Data Size for Handle 9	

Table D.A Module Backplane Communication Tag List

Tag Name	Data Type	Description	Initial Value
NX90_Received_Data_Size[10]	DINT	Actual Received Data Size for Handle 10	
NX90_Received_Data_Size[11]	DINT	Actual Received Data Size for Handle 11	
NX90_Received_Data_Size[12]	DINT	Actual Received Data Size for Handle 12	
NX90_Received_Data_Size[13]	DINT	Actual Received Data Size for Handle 13	
NX90_Received_Data_Size[14]	DINT	Actual Received Data Size for Handle 14	
NX90_Received_Data_Size[15]	DINT	Actual Received Data Size for Handle 15	
NX90_Received_Data_Size[16]	DINT	Actual Received Data Size for Handle 16	
NX90_Received_Data_Size[17]	DINT	Actual Received Data Size for Handle 17	
NX90_Received_Data_Size[18]	DINT	Actual Received Data Size for Handle 18	
NX90_Received_Data_Size[19]	DINT	Actual Received Data Size for Handle 19	
NX90_Received_Data_Size[20]	DINT	Actual Received Data Size for Handle 20	
NX90_Received_Data_Size[21]	DINT	Actual Received Data Size for Handle 21	
NX90_Received_Data_Size[22]	DINT	Actual Received Data Size for Handle 22	
NX90_Received_Data_Size[23]	DINT	Actual Received Data Size for Handle 23	
NX90_Received_Data_Size[24]	DINT	Actual Received Data Size for Handle 24	
NX90_Received_Data_Size[25]	DINT	Actual Received Data Size for Handle 25	
NX90_Received_Data_Size[26]	DINT	Actual Received Data Size for Handle 26	
NX90_Received_Data_Size[27]	DINT	Actual Received Data Size for Handle 27	
NX90_Received_Data_Size[28]	DINT	Actual Received Data Size for Handle 28	
NX90_Received_Data_Size[29]	DINT	Actual Received Data Size for Handle 29	
NX90_Received_Data_Size[30]	DINT	Actual Received Data Size for Handle 30	

Table D.A Module Backplane Communication Tag List

Tag Name	Data Type	Description	Initial Value
NX90_Received_Data_Size[31]	DINT	Actual Received Data Size for Handle 31	
NX91_Receive_Data_00	INT[512]	Receive 0 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_01	INT[512]	Receive 1 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_02	INT[512]	Receive 2 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_03	INT[512]	Receive 3 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_04	INT[512]	Receive 4 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_05	INT[512]	Receive 5 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_06	INT[512]	Receive 6 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_07	INT[512]	Receive 7 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_08	INT[512]	Receive 8 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_09	INT[512]	Receive 9 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_10	INT[512]	Receive 10 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_11	INT[512]	Receive 11 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_12	INT[512]	Receive 12 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_13	INT[512]	Receive 13 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_14	INT[512]	Receive 14 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_15	INT[512]	Receive 15 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_16	INT[512]	Receive 16 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_17	INT[512]	Receive 17 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_18	INT[512]	Receive 18 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_19	INT[512]	Receive 19 ; Data Buffer / Size < Max INT[512] >	

Table D.A Module Backplane Communication Tag List

Tag Name	Data Type	Description	Initial Value
NX91_Receive_Data_20	INT[512]	Receive 20 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_21	INT[512]	Receive 21 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_22	INT[512]	Receive 22 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_23	INT[512]	Receive 23 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_24	INT[512]	Receive 24 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_25	INT[512]	Receive 25 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_26	INT[512]	Receive 26 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_27	INT[512]	Receive 27 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_28	INT[512]	Receive 28 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_29	INT[512]	Receive 29 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_30	INT[512]	Receive 30 ; Data Buffer / Size < Max INT[512] >	
NX91_Receive_Data_31	INT[512]	Receive 31 ; Data Buffer / Size < Max INT[512] >	

Notes:

1756-CLX/C Module Tag List

Tag Name	Data Type	Description
Local:1:C.DATA	AB:1756 C:0	Control signal is not used (N/A)
Local:1:C.DATA	SINT[400]	
	AB:1756 I:0	1756-CLX/C Connected Input
	DINT[4]	Connected InputDINT [4]
Local:1:I.DATA[0]	DINT	Reserved for System
Local:1:I.DATA[1]	DINT	NX40 ; Status Data Table
Local:1:I.DATA[1].0	BOOL	NX40_Module_Enabled
Local:1:I.DATA[1].2	BOOL	NX42_Operation_Mode
Local:1:I.DATA[1].6	BOOL	NX46_System_Error
Local:1:I.DATA[1].7	BOOL	NX47_Module_Ready
Local:1:I.DATA[1].8	BOOL	NX48_Module_Enable_Ack
Local:1:I.DATA[2]	DINT	NX50_Send_Done
Local:1:I.DATA[2].0	BOOL	NX50_Send_Done.0
Local:1:I.DATA[2].1	BOOL	NX50_Send_Done.1
Local:1:I.DATA[2].2	BOOL	NX50_Send_Done.2
Local:1:I.DATA[2].3	BOOL	NX50_Send_Done.3
Local:1:I.DATA[2].4	BOOL	NX50_Send_Done.4
Local:1:I.DATA[2].5	BOOL	NX50_Send_Done.5
Local:1:I.DATA[2].6	BOOL	NX50_Send_Done.6
Local:1:I.DATA[2].7	BOOL	NX50_Send_Done.7
Local:1:I.DATA[2].8	BOOL	NX50_Send_Done.8
Local:1:I.DATA[2].9	BOOL	NX50_Send_Done.9
Local:1:I.DATA[2].10	BOOL	NX50_Send_Done.10
Local:1:I.DATA[2].11	BOOL	NX50_Send_Done.11
Local:1:I.DATA[2].12	BOOL	NX50_Send_Done.12
Local:1:I.DATA[2].13	BOOL	NX50_Send_Done.13
Local:1:I.DATA[2].14	BOOL	NX50_Send_Done.14
Local:1:I.DATA[2].15	BOOL	NX50_Send_Done.15

Tag Name	Data Type	Description
Local:1:I.DATA[2].16	BOOL	NX50_Send_Done.16
Local:1:I.DATA[2].17	BOOL	NX50_Send_Done.17
Local:1:I.DATA[2].18	BOOL	NX50_Send_Done.18
Local:1:I.DATA[2].19	BOOL	NX50_Send_Done.19
Local:1:I.DATA[2].20	BOOL	NX50_Send_Done.20
Local:1:I.DATA[2].21	BOOL	NX50_Send_Done.21
Local:1:I.DATA[2].22	BOOL	NX50_Send_Done.22
Local:1:I.DATA[2].23	BOOL	NX50_Send_Done.23
Local:1:I.DATA[2].24	BOOL	NX50_Send_Done.24
Local:1:I.DATA[2].25	BOOL	NX50_Send_Done.25
Local:1:I.DATA[2].26	BOOL	NX50_Send_Done.26
Local:1:I.DATA[2].27	BOOL	NX50_Send_Done.27
Local:1:I.DATA[2].28	BOOL	NX50_Send_Done.28
Local:1:I.DATA[2].29	BOOL	NX50_Send_Done.29
Local:1:I.DATA[2].30	BOOL	NX50_Send_Done.30
Local:1:I.DATA[2].31	BOOL	NX50_Send_Done.31
Local:1:I.DATA[3]	DINT	NX51_Receive_Request
Local:1:I.DATA[3].0	BOOL	NX51_Receive_Request.0
Local:1:I.DATA[3].1	BOOL	NX51_Receive_Request.1
Local:1:I.DATA[3].2	BOOL	NX51_Receive_Request.2
Local:1:I.DATA[3].3	BOOL	NX51_Receive_Request.3
Local:1:I.DATA[3].4	BOOL	NX51_Receive_Request.4
Local:1:I.DATA[3].5	BOOL	NX51_Receive_Request.5
Local:1:I.DATA[3].6	BOOL	NX51_Receive_Request.6
Local:1:I.DATA[3].7	BOOL	NX51_Receive_Request.7
Local:1:I.DATA[3].8	BOOL	NX51_Receive_Request.8
Local:1:I.DATA[3].9	BOOL	NX51_Receive_Request.9
Local:1:I.DATA[3].10	BOOL	NX51_Receive_Request.10
Local:1:I.DATA[3].11	BOOL	NX51_Receive_Request.11
Local:1:I.DATA[3].12	BOOL	NX51_Receive_Request.12
Local:1:I.DATA[3].13	BOOL	NX51_Receive_Request.13
Local:1:I.DATA[3].14	BOOL	NX51_Receive_Request.14
Local:1:I.DATA[3].15	BOOL	NX51_Receive_Request.15
Local:1:I.DATA[3].16	BOOL	NX51_Receive_Request.16
Local:1:I.DATA[3].17	BOOL	NX51_Receive_Request.17

Tag Name	Data Type	Description
Local:1:I.DATA[3].18	BOOL	NX51_Receive_Request.18
Local:1:I.DATA[3].19	BOOL	NX51_Receive_Request.19
Local:1:I.DATA[3].20	BOOL	NX51_Receive_Request.20
Local:1:I.DATA[3].21	BOOL	NX51_Receive_Request.21
Local:1:I.DATA[3].22	BOOL	NX51_Receive_Request.22
Local:1:I.DATA[3].23	BOOL	NX51_Receive_Request.23
Local:1:I.DATA[3].24	BOOL	NX51_Receive_Request.24
Local:1:I.DATA[3].25	BOOL	NX51_Receive_Request.25
Local:1:I.DATA[3].26	BOOL	NX51_Receive_Request.26
Local:1:I.DATA[3].27	BOOL	NX51_Receive_Request.27
Local:1:I.DATA[3].28	BOOL	NX51_Receive_Request.28
Local:1:I.DATA[3].29	BOOL	NX51_Receive_Request.29
Local:1:I.DATA[3].30	BOOL	NX51_Receive_Request.30
Local:1:I.DATA[3].31	BOOL	NX51_Receive_Request.31
Local:1:0	AB:1756 O:0	1756-CLX/C Connected Output
Local:1:O.DATA	DINT[5]	Connected Output DINT [5]
Local:1:O.DATA[0]	DINT	Reserved for System
Local:1:O.DATA[1]	DINT	NX20 ; Command Data Table
Local:1:O.DATA[1].0	BOOL	NX20_Module_Enable
Local:1:O.DATA[2]	DINT	NX30_Send_Request
Local:1:O.DATA[2].0	BOOL	NX30_Send_Request.0
Local:1:O.DATA[2].1	BOOL	NX30_Send_Request.1
Local:1:O.DATA[2].2	BOOL	NX30_Send_Request.2
Local:1:O.DATA[2].3	BOOL	NX30_Send_Request.3
Local:1:O.DATA[2].4	BOOL	NX30_Send_Request.4
Local:1:O.DATA[2].5	BOOL	NX30_Send_Request.5
Local:1:O.DATA[2].6	BOOL	NX30_Send_Request.6
Local:1:O.DATA[2].7	BOOL	NX30_Send_Request.7
Local:1:O.DATA[2].8	BOOL	NX30_Send_Request.8
Local:1:O.DATA[2].9	BOOL	NX30_Send_Request.9
Local:1:O.DATA[2].10	BOOL	NX30_Send_Request.10
Local:1:O.DATA[2].11	BOOL	NX30_Send_Request.11
Local:1:O.DATA[2].12	BOOL	NX30_Send_Request.12
Local:1:O.DATA[2].13	BOOL	NX30_Send_Request.13
Local:1:O.DATA[2].14	BOOL	NX30_Send_Request.14

Tag Name	Data Type	Description
Local:1:O.DATA[2].15	BOOL	NX30_Send_Request.15
Local:1:O.DATA[2].16	BOOL	NX30_Send_Request.16
Local:1:O.DATA[2].17	BOOL	NX30_Send_Request.17
Local:1:O.DATA[2].18	BOOL	NX30_Send_Request.18
Local:1:O.DATA[2].19	BOOL	NX30_Send_Request.19
Local:1:O.DATA[2].20	BOOL	NX30_Send_Request.20
Local:1:O.DATA[2].21	BOOL	NX30_Send_Request.21
Local:1:O.DATA[2].22	BOOL	NX30_Send_Request.22
Local:1:O.DATA[2].23	BOOL	NX30_Send_Request.23
Local:1:O.DATA[2].24	BOOL	NX30_Send_Request.24
Local:1:O.DATA[2].25	BOOL	NX30_Send_Request.25
Local:1:O.DATA[2].26	BOOL	NX30_Send_Request.26
Local:1:O.DATA[2].27	BOOL	NX30_Send_Request.27
Local:1:O.DATA[2].28	BOOL	NX30_Send_Request.28
Local:1:O.DATA[2].29	BOOL	NX30_Send_Request.29
Local:1:O.DATA[2].30	BOOL	NX30_Send_Request.30
Local:1:O.DATA[2].31	BOOL	NX30_Send_Request.31
Local:1:O.DATA[3]	DINT	NX31_Receive_Done
Local:1:O.DATA[3].0	BOOL	NX31_Receive_Done.0
Local:1:O.DATA[3].1	BOOL	NX31_Receive_Done.1
Local:1:O.DATA[3].2	BOOL	NX31_Receive_Done.2
Local:1:O.DATA[3].3	BOOL	NX31_Receive_Done.3
Local:1:O.DATA[3].4	BOOL	NX31_Receive_Done.4
Local:1:O.DATA[3].5	BOOL	NX31_Receive_Done.5
Local:1:O.DATA[3].6	BOOL	NX31_Receive_Done.6
Local:1:O.DATA[3].7	BOOL	NX31_Receive_Done.7
Local:1:O.DATA[3].8	BOOL	NX31_Receive_Done.8
Local:1:O.DATA[3].9	BOOL	NX31_Receive_Done.9
Local:1:O.DATA[3].10	BOOL	NX31_Receive_Done.10
Local:1:O.DATA[3].11	BOOL	NX31_Receive_Done.11
Local:1:O.DATA[3].12	BOOL	NX31_Receive_Done.12
Local:1:O.DATA[3].13	BOOL	NX31_Receive_Done.13
Local:1:O.DATA[3].14	BOOL	NX31_Receive_Done.14
Local:1:O.DATA[3].15	BOOL	NX31_Receive_Done.15
Local:1:O.DATA[3].16	BOOL	NX31_Receive_Done.16

Tag Name	Data Type	Description
Local:1:O.DATA[3].17	BOOL	NX31_Receive_Done.17
Local:1:O.DATA[3].18	BOOL	NX31_Receive_Done.18
Local:1:O.DATA[3].19	BOOL	NX31_Receive_Done.19
Local:1:O.DATA[3].20	BOOL	NX31_Receive_Done.20
Local:1:O.DATA[3].21	BOOL	NX31_Receive_Done.21
Local:1:O.DATA[3].22	BOOL	NX31_Receive_Done.22
Local:1:O.DATA[3].23	BOOL	NX31_Receive_Done.23
Local:1:O.DATA[3].24	BOOL	NX31_Receive_Done.24
Local:1:O.DATA[3].25	BOOL	NX31_Receive_Done.25
Local:1:O.DATA[3].26	BOOL	NX31_Receive_Done.26
Local:1:O.DATA[3].27	BOOL	NX31_Receive_Done.27
Local:1:O.DATA[3].28	BOOL	NX31_Receive_Done.28
Local:1:O.DATA[3].29	BOOL	NX31_Receive_Done.29
Local:1:O.DATA[3].30	BOOL	NX31_Receive_Done.30
Local:1:O.DATA[3].31	BOOL	NX31_Receive_Done.31
Local:1:O.DATA[4]	DINT	NX32_CPU_Slot_Number
Control Tag List (NXCT)		
NXCT00_1756-CLX/C_SR_OK	BOOL	1756-CLX/C Module Send/Receive OK
NXCT01_Module_Not_Ready_Error	BOOL	1756-CLX/C Module cannot become Module Ready after 5 minutes
NXCT02_Ack_Not_Received_Error	BOOL	NX48_Module_ Enable_Ack cannot b e received after 5 minutes
NXCT03_Module_Not_Enabled_Error	BOOL	1756-CLX/C Module cannot become enabled after 5 minutes
NXCT04_Failed_to_ONLINE_Error	BOOL	1756-CLX/C Module cannot go online after 5 minutes
NXCT05_Initialization_Error_Reset	BOOL	1 = Reset
NXCT10_Send_Request	DINT	Application ladder creates this signal
NXCT11_Send_Request_Pulse	DINT	
NXCT12_Send_Data_Strobe	DINT	
NXCT13_Send_Request_Delay_Pulse	DINT	
NXCT14_Send_Error_Reset	DINT	1 = Reset
NXCT15_Send_Request_Aboarted	DINT	
NXCT16_Send_Error_Occured	DINT	
NXCT17_Send_Timeout_Error	DINT	NX50_Send_Done cannot be received after 1 minute
NXCT20_Receive_Start	DINT	Application ladder creates this signal

Tag Name	Data Type	Description
NXCT21_Receive_Data_Strobe	DINT	
NXCT22_Receive_Error_Reset	DINT	1 = Reset
NXCT23_Receive_Request_Aboarted	DINT	
NXCT24_Receive_Timeout_Error	DINT	NX51_Receive _Request cannot be cleared after 1 minute
NXCT25_Receive_Request_Pulse	DINT	
Program Tag List (NXPT)		
NXPT00_Rung_Comment	BOOL	
NXPT01_Always_ON	BOOL	
NXPT02_Always_OFF	BOOL	
NXPT03_Init_Timer_00	TIMER	Timer to check NX47_Module_ Ready
NXPT03_Init_Timer_01	TIMER	Timer to check NX48_Module _Enable_Ack
NXPT03_Init_Timer_02	TIMER	Timer to check NX40_Module_ Enabled
NXPT03_Init_Timer_03	TIMER	Timer to check NX42_Operation _Mode
NXPT04_Module_Ready_Oneshot	BOOL	
NXPT05_Init_keepCoil	DINT	
NXPT10_Send_Oneshot	DINT	
NXPT11_Send_Timer_00	TIMER[32]	
NXPT20_Receive_Oneshot	DINT	
NXPT21_Receive_Timer_00	TIMER[32]	

Application Program (AP) An upper layer program used for application processing, including user processes and applications. An example of an application program is a Logix5550 program.

Autonomous Decentralized Protocol (ADP) An Application Layer message transfer protocol used in the NeXUS network.

BootP (Bootstrap Protocol) A low-level protocol that provides configurations to other nodes on a TCP/IP network. BootP configuration files let you automatically assign IP addresses to modules or other networked devices.

ControlBus The backplane used by the 1756 chassis. Acts as a network.

Control and Information Protocol (CIP) A communication protocol used to transfer messages over ControlBus and ControlNet networks.

DHCP The Dynamic Host Configuration protocol (DHCP) is an Internet protocol, similar to BootP, for automatically configuring computers that use the TCP/IP protocol. DHCP can be used to automatically assign IP addresses and deliver TCP/IP stack configuration parameters (such as the subnet mask and default router).

Ethernet A physical layer standard using Carrier sense Multiple Access with Collision Detection (CSMA/CD) methods.

Message A basic data unit passed to the ADP by an Application Program or delivered by the ADP to an Application Program.

NeXUS A trade name of a plant-floor TCP/IP over Ethernet type local area network with the ADP protocol on the top.

NeXUS Node or Station Any PLC, computer or other physical device connected to a NeXUS network.

Protocol Data Unit (PDU) PDU refers to a data unit passed to ADP from the lower layer protocol (UDP or TCP) and vise versa. It consists of a header and a message.

System Transaction A transaction generated when ADP detects an event (e.g. fault status or internal status change) and is used as a notice to an application program. The only system transaction currently defined in [1] is the Alive Signal **(TCD=60003).**

Transaction A process within an application program (User Transaction) or a system (System Transaction). Every transaction is identified by a unique Transaction Code (TCD).

Transaction Code (TCD) A unique number assign to each transaction (transaction identifier). It is included in each ADP PDU header. The User Transaction TCD range is from 1 to 59999. The System Transaction TCD range is from 60000 to 65534.

User Transaction A transaction within an application program. A TCD, assigned by the user, is provided to ADP along with a message to be transmitted and is included in a header of the PDU containing this message.

About the module 1-1
ADP message types supported 3-4
Alpha-numeric display 5-3

B

Battery 1-4

C

Chassis and power supply
installing 2-2
Configuration
accessing module tags 4-5
creating a new module 4-2
editing configuration in RSLogix 5000 4-5
overview of the process 4-2
Configuration requirements 3-4
Configuration software 4-1
Configuring the module 4-1

D

Documentation
related P-3

E

Electrostatic Discharge 1-5
Error codes 5-3
Ethernet
for more information about 3-8

G

Gateways 3-6

H

Hardware/software compatability 1-4

I

Inhibit
choosing in RSLogix 5000 4-4
installing the 1756-ENBT module
removing or replacing the module 2-5
Installing the module 2-1
IP address 3-4

M

Memory map A-1
Module
about 1-1
apply power 2-3
configuring 4-1
determine slot location 2-2
features 1-2
identify components 2-1
installing 2-1
remove or replace 2-5
Module tags
accessing in RSLogix 5000 4-5

N

NeXUS network
about 3-1
NeXUS network organization 3-3

P

Protocol structure 3-1

R

Removal and insertion under power 1-5, 2-4
Requested Packet Interval (RPI)
adjusting in RSLogix 5000 4-4
RIUP 1-5, 2-4
RSLogix5000 4-1

S

Specifications A-1
Status indicators
communications port 5-3
LED 5-2
troubleshooting 5-1
Subnet mask 3-7
Supported services 3-2
System time
adjusting the RPI 4-4

T

Tag List
module backplane communication D-1
Tag list E-1
Time charts D-1

W

Web interface C-1
user screens C-1

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